

## LiquiPro™ SL

### Chemical Mechanical Polishing (CMP) Filters



**LiquiPro™ SL Series filters are the next generation of pre-cleaned slurry filters designed for advanced chemical mechanical polishing (CMP).**

This filter series is built around the patented DUO3 process of using an outer melt blown media in combination with an inner nanofiber media. This is a departure from the tradition CMP filters that have either all wrapped layers, all pleated layers, or all melt blown layers. These SL Series filters are cost competitive with higher performance over traditional CMP filters.

#### LiquiPro™ SL

- These filters remove particles, aggregates, agglomerates, and microgels that are disruptive to the CMP process. These filters provide excellent capacity and have a sharp filtration cut off curve, so the particle size distribution of the desired slurry particles does not change after filtration.
- The nano-fiber media used in these filters are reliable and have excellent performance with colloidal, ceria, and alumina slurries.

#### SLB, SLC, and SLE Sub-series

- Uses a combination of a continuous melt blown media as the outer layers, and nanofiber wrapped media as the inner layers. These filters contain one inlet and one outlet connection.
- SLB: Optimized for less than 3µm.
- SLC: Optimized for greater than 3µm.
- SLE: Optimized with a larger filtration surface area for greater performance over the SLB filters. A vent and drain connection is added to the filter.

#### SLA, and SLD Subseries

- Uses a combination of pleated 3D melt blown media as the outer layers, and nanofiber wrapped media as the inner layers. These filters are optimized for less than 3µm.
- SLA: Contains an inlet and outlet connection
- SLD: Contains an inlet and outlet connection, as well as a vent and drain connection.

## Specifications

### Pore sizes rating for DUO<sup>3</sup> Series: (µm)

0.05, 0.07, 0.1, 0.2, 0.3, 0.5, 0.7, 1.0, 1.5, 3, 5, 7, 9, 10, 11.

### Maximum differential pressure:

2.4 bard (35 psid) @ 21°C (70°F)

4.0 bard (58 psid) @ 80°C (176°F)

### Maximum operating temperature

80°C (176°F)

### Materials of construction:

Materials: Polypropylene construction

Filter Media: PP

Filter Core/Cage/Endcap: PP

Cartridge O-rings/gasket: EPDM, FKM, E-FKM, PE gasket

### LiquiPro™ SLA-D, SLB-D, SLC-D



### LiquiPro™ SLD-D, SLE-D

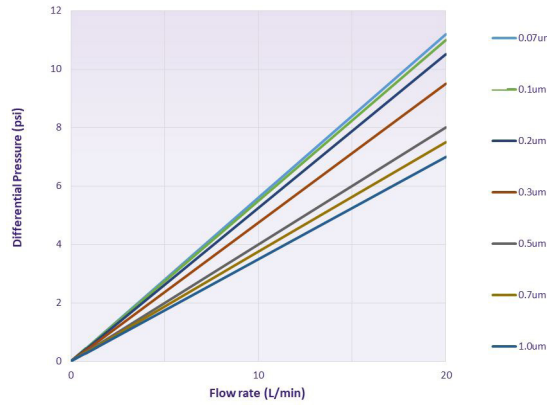


### LiquiPro™ SLA-C, SLB-C, SLC-C

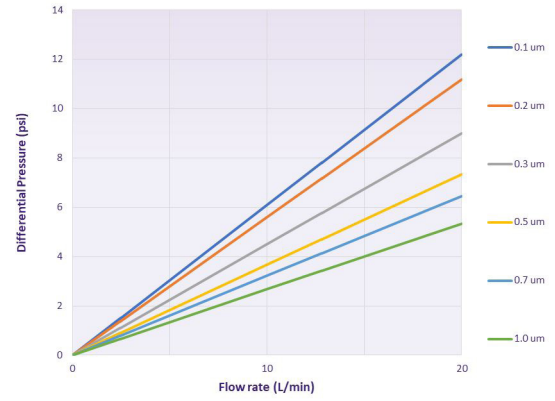


## Flow Charts

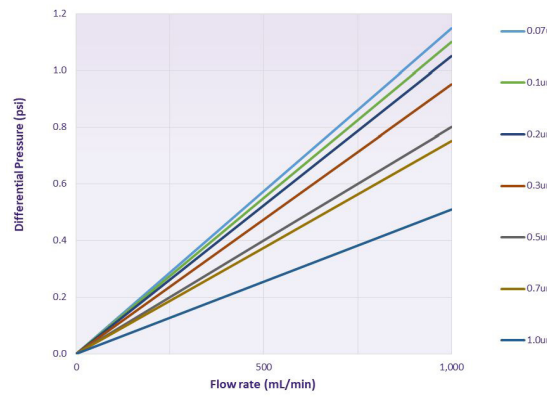
### LiquiPro™ SLA-C



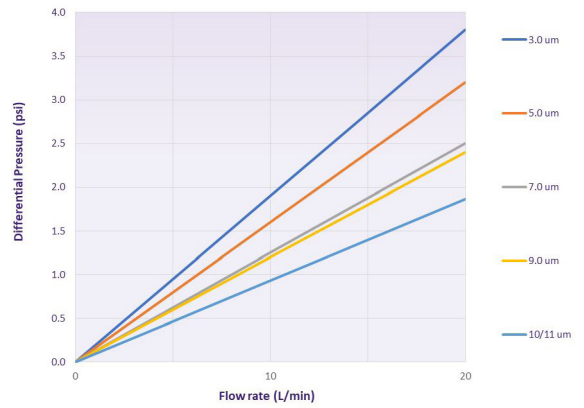
### LiquiPro™ SLB-C (10")



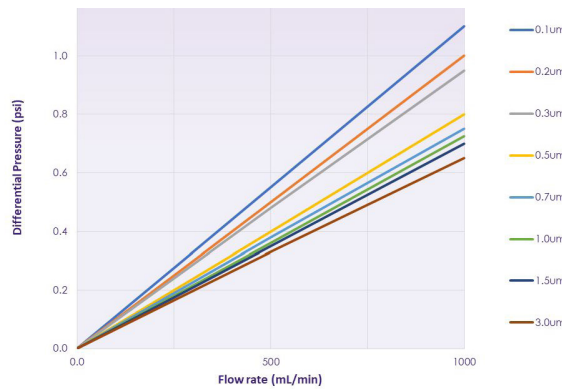
### LiquiPro™ SLA-D (Medium)



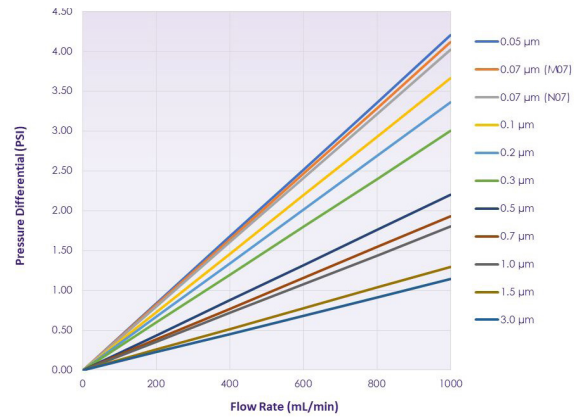
### LiquiPro™ SLC-C (10")



### LiquiPro™ SLD-D (Long)

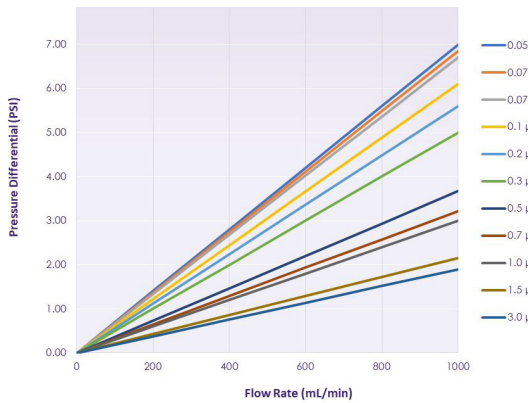


### LiquiPro™ SLE-D (Long)



## Flow Charts

### LiquiPro™ SLE-D (Short)



## Dimensions

### LiquiPro™ SLA-C, SLC-B and SLC-C (Cartridges)

Product	Length	Diameter (for SLA-C)	Diameter (for SLB-C - SLC-C)
5"	130 mm +/- 1 mm (5.12" +/- 0.04")	69 mm +/- 1 mm (2.72" +/- 0.04")	64 mm +/- 1 mm (2.52" +/- 0.04")
10"	264 mm +/- 1 mm (10.39" +/- 0.04")	69 mm +/- 1 mm (2.72" +/- 0.04")	64 mm +/- 1 mm (2.52" +/- 0.04")
20"	512 mm +/- 1 mm (20.16" +/- 0.04")	69 mm +/- 1 mm (2.72" +/- 0.04")	64 mm +/- 1 mm (2.52" +/- 0.04")

### LiquiPro™ SLA-D, SLB-D and SLC-D (Disposable Filters)

Product	Connections	Length	Diameter
Short	3/8" Flaretek fitting	156 mm (6.14")	93 mm (3.66")
Medium	3/8" Flaretek fitting	212 mm (8.35")	93 mm (3.66")
	ST Quick Connect fitting	202 mm (7.95")	93 mm (3.66")
Long	3/8" Flaretek fitting	351 mm (13.82")	93 mm (3.66")

### LiquiPro™ SLD-D (Disposable Filters)

Product	Connections	Length	Diameter
Short	F6F4	139 mm +/- 2 mm (5.47" +/- 0.08")	71 mm +/- 0.5 mm (2.80" +/- 0.02")
Short	F8F2	127 mm +/- 2 mm (5.00" +/- 0.08")	71 mm +/- 0.5 mm (2.80" +/- 0.02")
Short	F4F2	145 mm +/- 2 mm (5.71" +/- 0.08")	71 mm +/- 0.5 mm (2.80" +/- 0.02")
Short	F4N2	145 mm +/- 2 mm (5.71" +/- 0.08")	71 mm +/- 0.5 mm (2.80" +/- 0.02")
Long	F6F4	210 mm +/- 2 mm (8.27" +/- 0.08")	71 mm +/- 0.5 mm (2.80" +/- 0.02")
Long	F8F2	186 mm +/- 2 mm (7.32" +/- 0.08")	71 mm +/- 0.5 mm (2.80" +/- 0.02")
Long	F4F2	176 mm +/- 2 mm (6.93" +/- 0.08")	71 mm +/- 0.5 mm (2.80" +/- 0.02")

### LiquiPro™ SLE-D (Disposable Filters)

Product	Connections	Length	Diameter
Short	F6F4	154 mm +/- 2 mm (6.06" +/- 0.08")	83.8 mm +/- 1 mm (3.30" +/- 0.04")
Short	F6N2	154 mm +/- 2 mm (6.06" +/- 0.08")	83.8 mm +/- 1 mm (3.30" +/- 0.04")
Long	F6F4	214 mm +/- 2 mm (8.43" +/- 0.08")	83.8 mm +/- 1 mm (3.30" +/- 0.04")
Long	F6N2	214 mm +/- 2 mm (8.43" +/- 0.08")	83.8 mm +/- 1 mm (3.30" +/- 0.04")

### Part Numbering LiquiPro™ SLA-C (Cartridges). Eg. SLA-C01-A05A-1

Product	Pore Rating	End Cap	Length	O-Ring/ Gasket	Packaging	Extras
SLA-C	Q07 = 0.07 µm	-A = 222/Flat	05 = 5"	A = EPDM	-1 = 1/PK	K = Ezelock™ Key compatible to use with Chemlock cartridge housing
	01 = 0.1 µm	-B = DEO with gaskets	10 = 10"	B = FKM	-2 = IPWET™ Patented Prewet Disinfection	Blank = None
	02 = 0.2 µm		20 = 20"	C = E-FKM	-3 = Autoclave Disinfection	
	03 = 0.3 µm			D = PE Gasket	-4 = UPW Preclean Preconditioning Dry Package	
	05 = 0.5 µm					
	07 = 0.7 µm					
	10 = 1 µm					
	15 = 1.5 µm					
	30 = 3.0 µm					
	50 = 5.0 µm					

### Part Numbering LiquiPro™ SLA-D (Disposable Filters) Eg. SLA-D01-F3U02-1

Product	Pore Rating	Connection	Length	Packaging
SLA-D	Q07 = 0.07 µm	-F3U = 3/8" Flaretek I/O	02 = Short	-1 = 1/PK
	01 = 0.1 µm	-CSU = ST Quick Connect	05 = Medium	-2 = IPWET™ Patented Prewet Disinfection
	02 = 0.2 µm		10 = Long	-3 = Autoclave Disinfection
	03 = 0.3 µm			-4 = UPW Preclean Preconditioning Dry Package
	05 = 0.5 µm			
	07 = 0.7 µm			
	10 = 1 µm			
	15 = 1.5 µm			
	30 = 3.0 µm			
	50 = 5.0 µm			

### Part Numbering LiquiPro™ SLB-C - (Cartridges). Eg. SLB-C01-A05A-1

Product	Pore Rating	End Cap	Length	O-Ring/ Gasket	Packaging	Extras
SLB-C	01 = 0.1 µm	-A = 222/Flat	05 = 5"	A = EPDM	-1 = 1/PK	K = Ezelock™ Key compatible to use with Chemlock cartridge housing
	02 = 0.2 µm	-B = DEO with gaskets	10 = 10"	B = FKM	-2 = IPWET™ Patented Prewet Disinfection	Blank = None
	03 = 0.3 µm		20 = 20"	C = E-FKM	-3 = Autoclave Disinfection	
	05 = 0.5 µm			D = PE Gasket	-4 = UPW Preclean Preconditioning Dry Package	
	07 = 0.7 µm					
	10 = 1 µm					

### Part Numbering LiquiPro™ SLB-D - (Disposable Filters). Eg. SLB-D01-F3U02-1

Product	Pore Rating	Connection	Length	Packaging
SLB-D	01 = 0.1 µm	-F3U = 3/8" Flaretek I/O	02 = Short	-1 = 1/PK
	02 = 0.2 µm	-CSU = ST Quick Connect	05 = Medium	-2 = IPWET™ Patented Prewet Disinfection
	03 = 0.3 µm		10 = Long	-3 = Autoclave Disinfection
	05 = 0.5 µm			-4 = UPW Preclean Preconditioning Dry Package
	07 = 0.7 µm			
	10 = 1 µm			

**Part Numbering LiquiPro™ SLC-C - (Cartridges). Eg. SLC-C03-A05A-1**

Product	Pore Rating	End Cap	Length	O-Ring/ Gasket	Packaging	Extras
SLC-C	03 = 3 µm	-A = 222/Flat	05 = 5"	A = EPDM	-1 = 1/PK	K = Ezelock™ Key compatible to use with Chemlock cartridge housing
	05 = 5µm	-B = DEO with gaskets	10 = 10"	B = FKM	-2 = IPWET™ Patented Prewet Disinfection	Blank = None
	07 = 7 µm		20 = 20"	C = E-FKM	-3 = Autoclave Disinfection	
	09 = 9 µm			D = PE Gasket	-4 = UPW Preclean Preconditioning Dry Package	
	10 = 10 µm					
	11 = 11 µm					

**Part Numbering LiquiPro™ SLC-D - (Disposable Filters) Eg. SLC-D03-F3U02-1**

Product	Pore Rating	Connection	Length	Packaging
SLC-D	03 = 3 µm	-F3U = 3/8" Flaretek I/O	02 = Short	-1 = 1/PK
	05 = 5 µm	-CSU = ST Quick Connect	05 = Medium	-2 = IPWET™ Patented Prewet Disinfection
			10 = Long	-3 = Autoclave Disinfection
				-4 = UPW Preclean Preconditioning Dry Package

**Part Numbering LiquiPro™ SLD-D - (Disposable Filters) Eg. SLD-D01-F6F425-1**

Product	Pore Rating	Connection	Length	Packaging
SLD-D	01 = 0.1 µm	-F6F4 = 3/8" Flaretek I/O	25 = Short	-1 = 1/PK
	02 = 0.2 µm	= 1/4" Flaretek V/D	50 = Long	-2 = IPWET™ Patented Prewet Disinfection
	03 = 0.3 µm	-F4N2 = 1/4" Flaretek I/O		-3 = Autoclave Disinfection
	05 = 0.5 µm	= 1/8" NPT V/D		-4 = UPW Preclean Preconditioning Dry Package
	07 = 0.7 µm	-N8N2 = 1/2" NPT I/O		
	10 = 1 µm	= 1/8" NPT V/D		
	15 = 1.5 µm	-N4N2 = 1/4" NPT I/O		
	30 = 3.0 µm	= 1/8" NPT V/D		
	50 = 5.0 µm			

**Part Numbering LiquiPro™ SLE-D - (Disposable Filters) Eg. SLE-DN05-F6F425-1**

Product	Pore Rating	Connection	Length	Packaging
SLE-D	N05 = 0.05 µm	-F6F4 = 3/8" Flaretek I/O	25 = Short	-1 = 1/PK
	N07 = 0.07 µm	= 1/4" Flaretek V/D	50 = Long	-2 = IPWET™ Patented Prewet Disinfection
	N10 = 0.1 µm	-F6N2 = 3/8" Flaretek I/O		-3 = Autoclave Disinfection
	M07 = 0.07 µm	= 1/8" NPT V/D		-4 = UPW Preclean Preconditioning Dry Package
	02 = 0.2 µm			
	03 = 0.3 µm			
	05 = 0.5 µm			
	07 = 0.7 µm			
	10 = 1 µm			

IPWET: prewet/disinfecting process and the filter comes packed with UHP water with autoclave packaging.

Autoclave Disinfection: pressurized hot steam is used to kill microorganisms such as bacteria and spores.

EPW Preclean Preconditioning Dry Package: For customers who require additional cleaning steps.