porvair filtration group

LiquiPro™ MI

Disposable Capsule Filters

LiquiPro™ MI are high purity disposable filters offered with 3 different types of high-performance membranes: hydrophobic PTFE membrane; Nylon membrane and PES membrane with UHP virgin grade PP support materials for critical high purity photochemical point-of-use filtration applications.

Features and Benefits

- Ultra-clean filter design. Filter design, materials selection and UHP decontamination procedure are optimised to eliminate shedding and extractables to ensure reliable downstream cleanliness.
- LiquiPro™ MI provide excellent chemical compatibility to make these filters ideal for point-of-use photochemical filtration applications, including a broad range of photoresists and solvent.
- Designed for the removal of micro gel, soft gel and particles present in most advanced photoresist systems. Eliminates pre-wetting and reduces downtime.
- Advanced photoresist system consists of typically of solvent, photo acid generator (PAG), acid quenchers, additives and surfactants. Pre-wetting is not required.
- LiquiPro™ MI D PN series helps to eliminate micro-bridging defects in photoresist and cone defects in the anti-reflective coatings.
- This disposable series uses the highest quality PES membrane which is hydrophilic to positive developers such as TMAH and DI to eliminate the formation of bubbles and micro-bubbles during the spin rinse process.

Typical Applications

- Ultra-high-purity version for advanced EUV, 157nm; and 18.2MΩ DIW pre-flushed version for DUV-ArF-193nm and DUV-KrF-248nm photoresist filtration.
- Class 10000 clean room version for general photochemical and solvent filtration.
- Point-of-use solvent, IPA, acetone and others.
- Point-of-use Developer and DI water.

Performance Specifications

Pore size rating
0.05, 0.1, 0.2, 0.5, 1.0, 5.0, 10.0 µm

Maximum operating pressure:
6.0 bard (87 psid) @ 25°C (77°F)

Membrane area:
Short Series: PTFE/Nylon:1000-1150 cm^2 (155-178 in^2)
Long Series: PTFE/Nylon: 2000-2300 cm^2(310-356 in^2)

Maximum operating temperature
60°C (140°F)

Ordering Information

Variant	Length	Pore Rating	Connections	Cleanliness
MIDF: LiquiPro™ MI Disposable Capsule/PTFE w PP Support	**S**: Short (114-132 mm)	**005**: 0.05 µm	**S2**: 1/2" Compression I/O 1/4" Compression V/D	**U**: Ultra High Purity
MIDH: LiquiPro™ MI Disposable Capsule/Nylon w PP Support	**L**: Long (173-209 mm)	**010**: 0.1 µm	**S4**: 1/4" Compression I/O 1/4" Compression V/D	**P**: UPW Pre-Flushed TOC
MIDB: LiquiPro™ MI Disposable Capsule/PES w PP Support		**020**: 0.2 µm	**N2**: 1/2" NPT Male I/O 1/8" NPT Male V/D	
	Other pore ratings available upon request.		**N4**: 1/4" NPT Male I/O 1/8" NPT Male V/D	
			P2: 1/2" Super Pillar I/O 1/4" Super Pillar V/D	
			P4: 1/4" Super Pillar I/O 1/8" Super Pillar V/D	
			P8: 3/8" Super Pillar I/O 1/4" Super Pillar V/D	
			M6: 6mm Super Pillar I/O 4mm Super Pillar V/D	
			M8: 8mm Super Pillar I/O 4mm Super Pillar V/D	
			F6: 3/8" Flaretek I/O 1/4" Flaretek V/D	

Capsule Dimensions

Length Code	Fitting	Dia (Shell) mm/inch +/- 1mm	Dia (Max) mm/inch +/- 1mm	Length mm/inch +/-1mm
Short	S44	67.5 / 2.66	71.0 / 2,79	114.0 / 4,49
Short	N42	67.5 / 2.66	71.0 / 2,79	116.0 / 4,57
Short	N62	67.5 / 2.66	71.0 / 2,79	124.0 / 4.88
Short	N84	67.5 / 2.66	71.0 / 2,79	127.0 / 5.00
Short	P44	67.5 / 2.66	71.0 / 2,79	121.7 / 4.79
Short	PM64	67.5 / 2.66	71.0 / 2,79	121.7 / 4.79
Long	S84	67.5 / 2.66	71.0 / 2,79	179.0 / 7.05
Long	P64	67.5 / 2.66	71.0 / 2,79	193.2 / 7.61
Long	P84	67.5 / 2.66	71.0 / 2,79	193.2 / 7.61
Long	PM84	67.5 / 2.66	71.0 / 2,79	193.2 / 7.61
Long	F64	67.5 / 2.66	71.0 / 2,79	209.8 / 8.26
Long	N82	67.5 / 2.66	71.0 / 2,79	186.0 / 7.32

PFG957/Sept2020/Rev1/Oct2021

Contact Information:

UK, New Milton Division
Tel: +44 (0)1425 612010
info@porvairfiltration.com

US, Boise Division
Tel: +1 208 461 2090
infoUS@porvairfiltration.com

India, Mumbai Division
Tel: +91 22 2081 1148
infoIN@porvairfiltration.com