ABSMIR CS™

Charged UHMWPE Membrane Filters for the Electronics / Single Layer

INDUSTRIES & APPLICATIONS

Electronics : Process chemicals, Photoresists, Ultrapure water, Rinse solutions

Chemicals : Acids, Bases, Solvents

ABSMIR CS™ is a negatively charged UHMWPE(Ultra High Molecular Weight Polyethylene) filter designed for retention of both particulate matters and metal ions from aggressive chemicals including acids, bases, solvents and photoresists in the electronic industries.

ABSMIR ES™ provides reliable and consistent metal ion removal with extended filter service life.

ABSMIR ES™ is available in both cartridge and disposable filter formats. The encapsulated filters simplify installation and change out with minimizing downtime and contamination of the process.

FEATURES & BENEFITS

- High surface area provides reliable and extended metallic ion contamination removal
- Capsule filter types simplify installation and change out with minimizing contamination of the process and downtime
- 100% UPW flushed and integrity tested
- No binders are present to interrupt product quality
- All polypropylene construction provides excellent chemical compatibility and very low level of extractables
- Available in a wide range of end styles and micron ratings

TECHNICAL DATA

Nominal Dimensions

Cartridge 68Ø

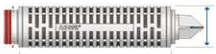
- **Length :** 250, 500 mm
- **Inner Diameter :** 30 mm
- **Outer Diameter :** 68 mm

CAP I

- **Length :** 143, 216 mm
- **Outer Diameter :** 71 mm / 73 mm

CAP II

- **Length :** 203, 212 mm
- **Outer Diameter :** 97 mm



Shoulder to Shoulder Length :
10 inch : 243 mm / 20 inch : 490 mm
30 inch : 737 mm / 40 inch : 984 mm

Capsule series CAP I and CAP II

* For details, see the Appendix II – Capsule Filter Types

Materials of Construction

· **Filtration Media**	UHMWPE
· **Support Media**	Polypropylene
· **Inner Core**	Polypropylene
· **Outer Cage**	Polypropylene
· **End Caps**	Polypropylene
· **Shell**	Polypropylene
· **O-rings / Gaskets**	Silicone, EPDM, Viton, TEV

Max. Operating Temperature

60°C (140°F)

Max. Operating Forward Differential Pressure

4 bard (58.0 psid) at 20 °C
3 bard (43.5 psid) at 40 °C
2 bard (29.0 psid) at 60 °C

Recommended Change Out Differential Pressure

2 bard (29.0 psid)

Nominal Pore Sizes

0.05, 0.1, 0.2, 0.45, 1 ㎛

Ion Exchange Capacity

- **Cartridge 68Ø :** > 43meq / 10 inch
- **CAP I :** > 10meq / unit
- **CAP II :** > 22meq / unit

Pre-Flush

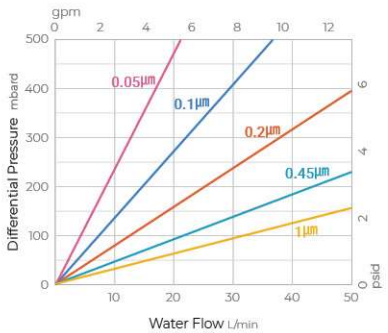
Pre-flushed with 18 MΩ UPW at 10LPM for 5min

Filtration Area

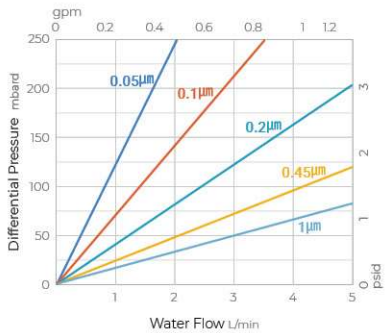
- **Cartridge 68Ø :** 0.55 ㎡ / 10 inch
- **CAP I :** 0.11 ㎡ / unit
- **CAP II :** 0.28 ㎡ / unit

TYPICAL CLEAN WATER FLOW

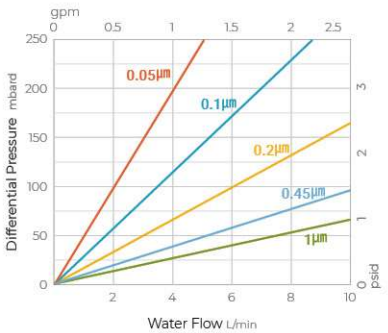
CARTRIDGE & CAP



10" Cartridge at 20°C Water



CAP I at 20°C Water



CAP II at 20°C Water

ORDERING INFORMATION

CARTRIDGES

❶		❷		❸	❹	❺	❻
MCS	-	001	-	C1	P	S	10
		MICRON RATING		END STYLE	HARDWARE	SEALS	LENGTH
		P05 : 0.05µm P10 : 0.1µm P20 : 0.2µm P45 : 0.45µm 001 : 1µm		C1 : DOE C2 : 226Lock/FLAT C3 : c222/cFLAT E3 : 222/FLAT C7 : 226Lock/FIN E8 : 222/FIN	P : PP E : HDPE	S : Silicone E : EPDM V : Viton F : TEV	10 : 250mm 20 : 500mm 1E : 254mm 2E : 508mm

CAPSULE SERIES

❶	❷	❸		❹		❺	❻
C1	MCS	001	-	S6	P	S	1S
FILTER TYPE				END STYLE		SEALS	LENGTH
C1 : CAP I C2 : CAP II						X : NA S : Silicone E : EPDM V : Viton F : TEV	
		MICRON RATING					
P05 : 0.05µm P45 : 0.45µm P10 : 0.1µm 001 : 1µm P20 : 0.2µm							

TYPE	CODE	In/Out Connection	Vent / Drain
CAP 1	S6	1/4" Swagelok	1/8" Swagelok
	N6	1/4" NPT	1/8" NPT
	F9	1/8" Flaretek	
	F9	3/8" Flaretek	
	P6	1/4" Super Pillar	1/8" Luer
CAP 2	CL	CL	NA
	F9	3/8" Flaretek	
	FE	1.5" Ferrule	1/4" Hose Barb

TYPE	CODE
CAP 1	1S : Standard
CAP 2	2S : Standard