

mdi AseptiCap WS are low protein binding hydrophilic PVDF membrane capsule filters offering serial filtration incorporating a large pore size upstream membrane to protect the downstream membrane for enhanced throughput.

These capsule filters are validated to meet compendia and regulatory requirements and are well characterized. They meet key process requirements such as absolute retention efficiency, extremely low extractables, high throughputs, wide chemical compatibility and other important characteristics.

Key features

- Absolute retention
- 100% integrity tested
- Low protein binding
- Low extractables
- Low hold up volume

Applications

- Antibodies
- Protein Solutions
- Buffers
- Vaccine concentrates
- Small Volume Parenterals

Microbially Validated as per ASTM F 838-05
Complies with USFDA 21 CFR 210.3(b)(6)
Meets and Exceeds USFDA 21 CFR 177.1520

Ordering Information

Type	Size		Pore Size		Inlet /Outlet		X	Inline/T-Line		Sterility		Pack Size	
	Code	Length and EFA	Code	Code	Code	Code		Code	Code	Code	Code	Code	
AseptiCap WS (0.45 µm upstream)	LWSX	5" (3000 cm ²)	53	0.2 µm	01	1½" Sanitary Flange	E	Inline	X	Non-Sterile	1	1	01
		10" (6000 cm ²)	54	0.45 µm	02	Single Step ½" Hose Barb	Q						
AseptiCap WS (0.8 µm upstream)*	LWSS	20" (12000 cm ²)	55			¾" Sanitary Flange****	E	T-Line**	T	EO Sterile	2		
		30" (18000 cm ²)	56			⅝" Hose Barb	I						
						1" Hose Barb***	Z						

EFA: Effective Filtration Area

Example

LWSX	56	01	QQ	X	X	1	01
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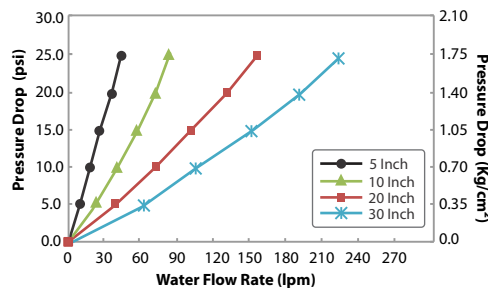
Specifications

Pore Size
0.2 µm and 0.45 µm

Materials of Construction

Membrane	Hydrophilic PVDF
Support Layer	Polyester
Plastic Components	Polypropylene

Typical Water Flow Rates, 0.2 µm



Microbial Retention

0.2 µm: LRV >7 for *B. diminuta* (ATCC 19146) per cm²
0.45 µm: LRV >7 for *Serratia marcescens* (ATCC 14756) per cm²

Maximum Operating Temperature
80 °C @ ≤ 30 psi (2 Kg/cm²)

Maximum Differential Pressure
60 psi (4 Kg/cm²) @ 30 °C

Bubble Point

0.2 µm: ≥ 50psi (3.51Kg/cm²) with Water
0.45 µm: ≥ 30 psi (2.11 Kg/cm²) with water

Sterilization

By Autoclave: Autoclavable at 125°C for 30 minutes, 2 cycles. Can not be in-line steam sterilized

By Gas: Sterilization by Ethylene Oxide

Toxicity

Passes Bioreactivity test, In Vivo, as per USP <88> for Class VI plastics

Cytotoxicity

Passes Biological Reactivity Tests, In Vitro, USP <87> for cytotoxicity

Bacterial Endotoxin

Aqueous extracts exhibit < 0.25 EU/ml as established by Limulus Amebocyte Lysate (LAL) Test as per USP <85>

Fiber Release

Passes test as per USP and comply with USFDA 21 CFR Part 210.3(b)(6) for fiber release

Particle Release:

The filtrate complies with USP <788> test for particulate matter in injections

TOC and Conductivity

Meets the WFI requirements of USP for TOC <643> and Conductivity <645> after flushing with a specified volume of WFI

Extractables with WFI

Passes test as per USP <661>

Oxidizable Substances

Passes test as per USP <1231>