

Depth Stacked Filter

HE-16 Series

Eternalwater depth stacked filter is mainly used in the clarification step of pharmaceutical processes. It' s paired with stainless steel filter housing for filtration and is available in multiple sizes to meet diverse customer needs. The depth stacked filter offers multiple filter plate combinations. Each filter plate is composed of cellulose, filter aids, and positively charged resins, delivering exceptional dirt-holding capacity. The depth stacked filter is suitable for cell culture clarification and features a multi-stage retention mechanism that effectively captures intact cells and cell debris while reducing turbidity. Additionally, it can effectively adsorb impurities including DNA, HCP (host cell proteins), and endotoxins, thereby substantially reducing the purification burden in downstream processes.

Product Features

- Multiple sizes are available, and can be customized according to customer needs
- Flexible media selection enables targeted product development based on the characteristics of feed stream
- Compatible with major filter housing systems, offering excellent structural adaptability
- Rigorous production controls and release testing ensure reliable performance and reduced process risks

Typical Application

- Cell culture clarification
- Vaccine Manufacturing Clarification
- Post-Centrifugation Yeast Broth Clarification
- Other Feedstock Clarification

Parameters

Product Series	Effective Filtration Area	Product Height (mm)
16inch double-layer depth stacked filter 8/10 layers	1.8/2.3	184/275
16inch single-layer depth stacked filter 10/16 layers	2.3/3.6	258/275
16inch other custom specifications	Optional	/

Filter Plate	Cellulose, filter aids, resins, or pure cellulose
Frame and Cover Material	Glass-Filled Polypropylene
Stainless Steel Support Bands	316L
O-ring Material	Silicone
Particle Challenge	Retention Rate > 90%
Maximum Operating Pressure	3.0bar@RT
Maximum Differential Pressure	Forward: 2.0bar@RT / Reverse: Not Recommended
Sterilization Resistance	SIP: 126°C 30min, 3 times
Indirect Food Additives	All materials in the depth stacked filter comply with FDA 21 CFR 177-182 requirements for indirect food additives
Toxicity	All components meet USP <88> Class VI biological safety requirements for plastics in vivo
Bacterial Endotoxins	Rinse fluid endotoxin level <0.25 EU/mL, complying with the requirements for Water for Injection (WFI) of Chinese Pharmacopoeia (ChP) and United States Pharmacopeia (USP)

Ordering Information

HE-16 1 2 3 4 5 6 7 8

Block 1		Block 2		Block 3		Block 4	
Code	Double-Layer Removal Rating	Code	Single-Layer Removal Rating	Code	Membrane Combination	Code	Size
HE01	0.3-1.6µm	HE44	0.5-1.6µm	A	Double-Layer	16	16inch
HE02	0.1-1.6µm	HE57	0.3-0.7µm	B	Single-Layer		
HE06	0.3-10µm	HE58	0.1-0.5µm	Block 5		Block 6	
HE13	0.1-10µm	HE62	0.05-0.3µm	Code	End Cap Type	Code	Structure
HE15	0.1-0.5µm	HF17	4-10µm	F	DOE	A	Stainless Steel Support Band
HE16	0.1-0.3µm						
HE47	0.05-1.6µm						
HE48	0.05-0.5µm						
HE49	0.05-0.3µm						
				Block 7		Block 8	
				Code	O-ring	Code	Packing
				S	Silicone	1	1pcs/pack

