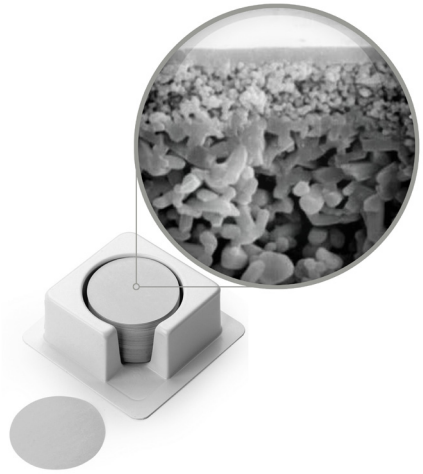
CERAMIC MEMBRANE FILTERS



Inorganic, hydrophilic ceramic membrane filters are ideally suited for use with extreme operating processes that require longevity and resistance to aggressive solvents and temperatures.

Ceramic filters provide maximum durability across a range of laboratory-scale microfiltration, ultrafiltration, dead-end, and crossflow applications. These filters are adapted for each filtration category and feature customized active layers based on respective molecular weight cutoff (MWCO) levels. These ceramic filters feature titania (TiO_2) support layers, are inert to most chemicals and solvents, have a wide pH tolerance range, and exhibit remarkable performance under demanding thermal conditions. Ceramic membranes can withstand many repeated autoclave and/or chemical (EtO) sterilization cycles and are built for maximum operational longevity; often retaining functionality for many years beyond their organic, polymeric counterparts. Additionally, these filters provide resistance against high backwash velocity, high levels of flux, and reduce fouling tendency.

Ceramic membrane disc holders are made of stainless steel and designed for dead-end filtration with the use of a pressure vessel. These filter holders support both 47 and 90 mm ceramic discs, are compatible with Viton, EPDM, and silicone O-rings, and include inlet and outlet connections for serrated tubes.

APPLICATIONS:

- Sterile concentrations
- Purification of cells, yeast, proteins, bacteria, serums, broth, and enzymes
- General separations
- Fine UF, UF, and MF processes

CERAMIC DISC HOLDERS	
Body	Stainless Steel
Membrane Dia.	47 or 90 mm
Filtration Area	***47 mm:*** 13 cm^2 (2 in^2) ***90 mm:*** 56 cm^2 (8.7 in^2)
O-Rings	Viton, EPDM, Silicone
Connections	6 mm Hose Barb, 1/8 in (3.2 mm) NPTF
Pressure Inlet	58 psi (4 bar)
Max. Temp.	266°F (130°C)

GENERAL SPECIFICATIONS	
Sterilization	EtO, Autoclave
Nominal Thickness	2.5 mm
Max. Pressure	58 psi (4 bar)
Max. Operating Temp.	662°F (350°C)

PERFORMANCE BY PORE SIZE			
	Designation	**pH Range**	**Active Layer**
1 kDa	Fine UF[1]	2-14	TiO_2
3 kDa	Fine UF	2-14	TiO_2
5 kDa	Fine UF	2-14	TiO_2
8 kDa	Fine UF	2-14	TiO_2
15 kDa	UF	0-14	ZrO_2
50 kDa	UF	0-14	ZrO_2
150 kDa	UF	0-14	ZrO_2
300 kDa	UF	0-14	ZrO_2
0.14 µm	MF	0-14	ZrO_2-TiO_2
0.22 µm	MF	0-14	ZrO_2-TiO_2
0.45 µm	MF	0-14	ZrO_2-TiO_2
0.80 µm	MF	0-14	ZrO_2-TiO_2
1.40 µm	MF	0-14	ZrO_2-TiO_2

[1] Fine UF membranes are shipped dry, but must be stored wet after first use. To prevent microbial growth, it is recommended to use a solution of 1% sodium metabilsulfite in ultrapure water and store the wetted membranes in a zip-closure bag.