Protein concentration - Ultrafiltration

Ultrafiltration devices, Pellicon® XL 50



- Concentration, desalting, and buffer exchange of proteins, polysaccharides, lipid solutions, viruses, colloids, cell suspensions, and mammalian cells
- Sample preparation
- Membrane selection studies
- · Preparation of material for clinical trials
- · Small volume manufacturing



The Pellicon* XL 50 cassette couples Millipore's superior ultrafiltration membranes with the first truly linearly scalable TFF cassette for processing small volumes. Whether you choose a Biomax membrane for its high flux and wide pH compatibility, or Millipore's unique Ultracel* membrane for its low protein binding and easy cleaning you are assured of reliable and consistent performance.

Pellicon* XL 50 cassettes are 100% integrity tested in manufacturing to ensure consistent and reliable performance.

Technical Specification - Specific

Туре	Biomax polyethersulfone membrane	Ultracel® regenerated cellulose membrane	
pH	Compatible with 1 to 14	Compatible with 2 to 12	

Technical Specification - General

Materials of construction	Polyethersulfone membrane. Polypropylene screens, housing, connectors, Luer caps	
Connections	Female Luer	
Filtration area, cm ²	50	
Dimensions [w x d], mm	30 x 188	
Hold up volume, mL	3.2 (typical)	
Pressure [max.], bar	5.6 (80psi) (operating) 2.7 (40psi) (transmembrane)	
ecirculation rate, L/min 0.03 to 0.05		

Biomax polyethersulfone

Catalogue No	Alt. No	NMWL, kDa
	-	, .
MQA-150-205W	PXB005A50	5
MQA-150-215T	PXB010A50	10
MQA-150-220D	PXB030A50	30
MQA-150-225Q	PXB050A50	50
MQA-150-230A	PXB100C50	100
MQA-150-235N	PXB300C50	300
MQA-150-240U	PXB500C50	500
MQA-150-245K	PXB01MC50	1,000

Ultracel® regenerated cellulose

Catalogue No	Alt. No	NMWL, kDa
MQA-150-250R	PXC005C50	5
MQA-150-255H	PXC010C50	10
MQA-150-260X	PXC030C50	30
MQA-150-265E	PXC300C50	300

Accessories

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Catalogue No	Alt. No	Description
MQA-150-280Y	XXPXLSTND	Stands for Pellicon® TFF products
MQA-150-285V	XX42RES01	500mL reservoir
MQA-150-290F	XXPXLGAGE	1 pressure gauge, Opsi to 60psi, and connection fittings

Microfiltration devices, Pellicon® XL 50



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Harvest, washing, or clarification of cell cultures, lysates, and fermentation broths.

- · Sample preparation
- Membrane selection studies
- Preparation of material for clinical trials
- Small volume manufacturing



The Pellicon® XL 50 cassette couples Millipore's superior microfiltration membranes with the first truly linearly scalable TFF device for processing small volumes. The Durapore membrane offers ultra-low protein binding and excellent retention performance, which assures reliable and consistent performance.

For linear scalability to exist within a family of TFF devices, the channel geometry (path length and channel height) must be identical for each filter. The Pellicon* XL 50 cassette is the only TFF product of this size that can make this claim, providing simple, reliable linear scaleup. The feed and permeate flow channels in every Pellicon* XL 50 cassette operates with the same pressure drop, flow velocity, and concentration profile as the larger Pellicon* 2 cassettes.

The Labscale TFF System is easy to use for sample preparation while also providing the necessary controls for process development and scale-up work.

Consistent High Flux and High Product Recovery

The long established Durapore hydrophilic PVDF microfiltration membrane is well known for its exceptional combination of high flux, low protein binding, and high product recoveries.

Pellicon* XL 50 cassettes are 100% integrity tested in manufacturing to ensure consistent and reliable performance.

Technical Specification - General

Materials of construction	Polyvinylidene fluoride membrane. Polypropylene screens, housing, connectors, Luer caps
Connections	Female Luer
Filtration area, cm ²	50
Dimensions [w x d], mm	30 x 188
Hold up volume, mL	3.2 (typical)
Pressure [max.], bar	5.6 (80psi) (operating) 2.7 (40psi) (transmembrane)
Recirculation rate, L/min	0.03 to 0.05
pH	Compatible with 1.5 to 9 (continuous) 1 to 11 (cleaning)

Hydrophilic PVDF

Catalogue No	Alt. No	Filter pore, µm
MQA-150-005H	PXVVPPC50	0.1
MQA-150-010X	PXGVPPC50	0.22
MQA-150-015E	PXHVMPC50	0.45
MQA-150-020L	PXDVPPC50	0.65

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