

## mini-BioProducer12 ReUse

Re-Usable  
Hollow Fiber Cartridges  
Easy and Reliable.



The **mini-BioProducer12 ReUse** series of cross flow hollow fiber membrane cartridges are designed for pilot scale and medium scale production and is the perfect tool for process development. With a surface area of 0.62 m<sup>2</sup>, the **mini-BioProducer24 ReUse** can accommodate batch volumes that range from 10L to 70L with a typical process flow of 31L/hr.

The **mini-BioProducer12 ReUse** HF cartridges are ideal for concentration and diafiltration of peptides, enzymes, monoclonal antibodies and other proteins and vaccines as well as cell harvest and cell clarification.

The **mini-BioProducer ReUse** cartridges integrate WaterSep's well accepted antifouling, low binding, modified polyethersulfone membrane (m-PES) and are offered in molecular weight cut-offs (MWCO) that range from 3K to 750K and in pore sizes from 0.1  $\mu\text{m}$ , 0.2  $\mu\text{m}$ , 0.45  $\mu\text{m}$  and 0.65  $\mu\text{m}$ , with Lumen ID's of 0.5 mm, 1.0 mm and 2.0 mm. The antifouling properties of the m-PES membranes typically provide superior process flux and higher product recovery than do most other cross flow devices.

The **mini-BioProducer ReUse** hollow fiber cartridges are offered with the same path length as other high performance WaterSep HF cartridges, which makes scale up/scale down easy and predictable.

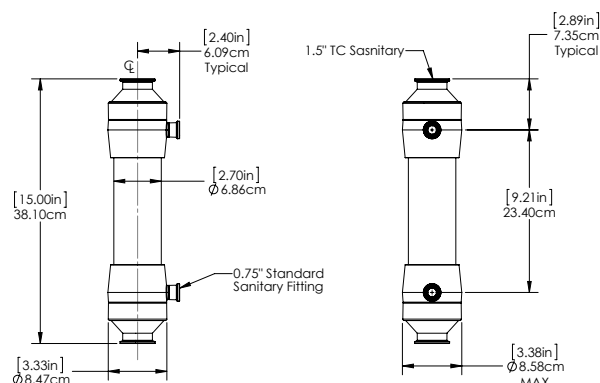
The **mini-BioProducer ReUse** cartridges can be sanitized and cleaned in 0.5-1.0 N NaOH, and stored in 0.1 N NaOH between uses.

For those applications where re-use is acceptable, the **mini-BioProducer12 ReUse** cartridges offer:

- Self-containment – no assembly – ease of use.
- Very cost effective in large scale format (hollow fiber products that are 4x-6x less expensive than most cassettes and do not require any expensive hardware for installation).
- Gentle processing of cells, biomolecules and viruses.
- Low hold-up volume.
- High process flux, due to antifouling low binding m-PES membrane chemistry.
- Robust, strong, multi-use hollow fiber membranes.
- High yields and easy cleaning.
- 100% integrity tested and ready to use cassettes.
- Very tight specifications and high lot-to-lot membrane consistency.
- Easy and reliable scale up.

## TYPICAL APPLICATIONS

- Clarification of cell culture and fermentation suspensions in primary recovery applications.
- Cell-harvest. (Excellent results have been achieved with both *E. Coli* whole cells and *E. Coli* lysates, as well as other microbial process streams.)
- Concentration and purification of vaccines.
- Concentration/diafiltration of monoclonal antibodies, recombinant proteins, biological macromolecules and peptides.



## mini-BioProducer12 ReUse

### Ordering Information

Replace XXX with 003 for 3K, 005 for 5K, 010 for 10K, 030 for 30K, 050 for 50K, 100 for 100K, 300 for 300K, 500 for 500K, 750 for 750K, 910 for 0.1  $\mu\text{m}$ , 920 for 0.2  $\mu\text{m}$ , 945 for 0.45  $\mu\text{m}$ . and 965 for 0.65  $\mu\text{m}$ .

BA XXX 05MPR12 S0, 1/pkg  
mini-BioProducer12 ReUse HF Cartridge  
6.67 ft<sup>2</sup>, (0.62 m<sup>2</sup>)  
0.5 mm ID\*  
Not available in 0.1  $\mu\text{m}$  - 0.65  $\mu\text{m}$

BA XXX 10MPR12 S0, 1/pkg  
mini-BioProducer12 ReUse HF Cartridge  
6.67 ft<sup>2</sup>, (0.62 m<sup>2</sup>)  
1 mm ID

BA XXX 20MPR12 S0, 1/pkg  
mini-BioProducer12 ReUse HF Cartridge,  
6.67 ft<sup>2</sup>, (0.62 m<sup>2</sup>)  
2 mm ID\*  
\*Not available in 3K, 5K, 30K, 100K and 0.65  $\mu\text{m}$

### SPECIFICATIONS

Cartridge Dimensions  
2.70" (6.86 cm) x 15.00" (38.10 cm)

Membrane Surface Area  
6.67 ft<sup>2</sup> (0.62 m<sup>2</sup>)

Molecular Weight Cut-off  
3K, 5K, 10K, 30K, 50K, 100K, 300K, 500K, 750K

Membrane Pore Size  
0.1  $\mu\text{m}$ , 0.2  $\mu\text{m}$  and 0.45  $\mu\text{m}$ , 0.65  $\mu\text{m}$

Fiber ID  
0.5mm, 1.0mm, 2.0mm

### MATERIALS OF CONSTRUCTION

Membrane  
Modified Polyethersulfone (m-PES)

Housing  
White Polysulfone

Encapsulant  
USP Class VI - Compliant Epoxy

### CONNECTIONS

Feed/Retentate  
1.5" TC

Permeate  
0.75" TC