# WaterSep\*

## BioProducer12 ReUse



The BioProducer12 ReUse is a production scale hollow fiber cartridge designed for biopharmaceutical concentration/diafiltration and clarification unit operations. With a surface area of 1.2 m², the BioProducer12 ReUse HF cartridge can accommodate batch volumes between 25 L and 100 L with a typical process flow of 60 L/hr.

The BioProducer ReUse 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 BioProducer12 ReUse cartridges utilize WaterSep's well accepted antifouling, low binding, modified polyethersulfone (m-PES), membrane and are offered in molecular weight cut-offs (MWCO) that range from 3K to 750K and in pore sizes from 0.1  $\mu$ m, 0.2  $\mu$ m, 0.45  $\mu$ m and 0.65  $\mu$ 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 BioProducer12 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 BioProducer ReUse cartridges can be sanitized and cleaned in 0.5-1.0 N NaOH, and stored in 0.1 N NaOH between uses.

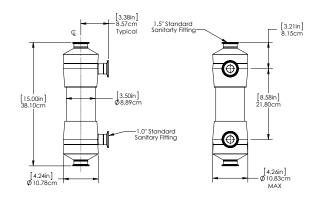
## ReUsable Hollow Fiber Cartridges

For those applications where re-use is acceptable, the 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, bio molecules 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.



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## **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  $\mu$ m, 920 for 0.2  $\mu$ m, 945 for 0.45  $\mu$ m.and 965 for 0.65  $\mu$ m.

BA XXX 05PRO12 SG BA XXX 05PRO12 SK

BioProducer12 ReUse HF Cartridge 12.92 ft<sup>2</sup>, (1.2 m<sup>2</sup>) 0.5 mm ID 1/pkg

BA XXX 10PRO12 SG BA XXX 10PRO12 SK

BioProducer12 ReUse HF Cartridge 12.92 ft², (1.2 m²) 1 mm ID 1/pkg

BA XXX 20PRO12 SG BA XXX 20PRO12 SG

BioProducer12 ReUse HF Cartridge, 12.92 ft², (1.2 m²) 2 mm ID 1/pkg

### **SPECIFICATIONS**

Cartridge Dimensions 15" (38.10 cm) x 3.5" (8.89 cm)

Membrane Surface Area 12.92 ft<sup>2</sup> (1.2 m<sup>2</sup>)

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

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

Fiber ID 0.5mm, 1.0mm, 2.0mm

#### MATERIALS OF CONSTRUCTION

Membrane
Modified Polyethersulfone (m-PES)

Housing
White Polysulfone

Encapsulant
USP Class VI - Epoxy

#### CONNECTIONS

Feed/Retentate 1.5" TC (SK) 3.0" TC (SG)

Permeate 1.0" TC