

mini-BioProducer24 Steamer

Autoclavable, Gamma Irradiated Hollow Fiber Cartridges Easy and Reliable



The **mini-BioProducer Steamer** hollow fiber membrane products incorporates our latest glycerin-free, heat resistant, low extractable modified polyethersulfone membrane technology. All **Steamer** products are gamma irradiated and ready to use without any tedious pre-rinse. The **Steamer HF** cartridges are the product of choice for perfusion/ATF applications. They can be repetitively autoclaved in an ATF perfusion unit or as a stand alone HF cartridge. The **mini-BioProducer Steamer** is also available as a single use assembly for crossflow perfusion applications.

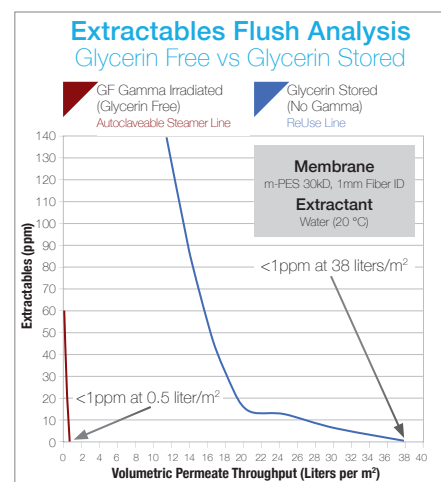
The extractable level for the **mini-BioProducer Steamer** is approximately 80x less than a glycerin conditioned membrane or at sheet cassette. See [Extractables Flush Analysis](#). After a quick buffer conditioning the HF cartridge is ready to use, or to be or autoclaved. For autoclaving directions, please see the [Steamer Validation Guide](#).

The **mini-BioProducer Steamer** hollow fiber cartridges are designed for small to medium scale production and are the perfect tools for scale up studies to **Steamer BioProducer** multi-cartridge systems. With a surface area of 1.3 m², the **mini-BioProducer24 Steamer** HF cartridge can accommodate batch volumes between 10L and 100L with a typical permeate flow rate of 39-78 L/hr for ultrafiltration applications and 26-52 L/hr for microfiltration applications.

Offered in the same path length as all other WaterSep 24" (60 cm) hollow fiber cartridges, the **mini-BioProducer24 Steamer** HF cartridge offers exact and predictable scale up and scale down.

The **mini-BioProducer24 Steamer** cartridges offer true ready to use cross flow filtration that is:

- Gamma irradiated - ready to use - no rinse.
- Humectant free - 80% less extractables,
- Free of time-consuming cleaning validation.
- At a reduced risk of cross contamination.
- Consistent, membrane performance batch to batch.
- Self-contained and requires no assembly, no expensive hardware and no membrane installation.
- Significantly less expensive than traditional cassette formats.
- Every HF cartridge is integrity tested and has an individual lot number for easy traceability.



TYPICAL APPLICATIONS

- **Cell perfusion** with an ATF System or conventional pump operated crossflow perfusion system. Bioreactor and **Steamer** hollow fiber assembly can be autoclaved simultaneously.
- Small to medium scale **aseptic operations** or any other sterile application requiring autoclaving.
- Rapid clarification of small volumes of **cell culture, fermentation solutions and virus/ vaccine suspensions**.
- Concentration and diafiltration of **monoclonal antibodies, enzymes, blood components** and other proteins.

mini-BioProducer24 Steamer

ORDERING INFORMATION

Place orders online at www.watersep.net, or email purchase orders to orders@watersep.net, sales order confirmation to follow.

mini-BioProducer24 Steamer HF Cartridge

0.5 mm ID*

AU XXX 05MPR24 S3, 3/pkg

AU XXX 05MPR24 S6, 6/pkg

*Not available in 0.65 μ m

1.0 mm ID

AU XXX 10MPR24 S3, 3/pkg

AU XXX 10MPR24 S6, 6/pkg

AU XXX 20MPR24 S6, 6/pkg

2.0 mm ID*

AU XXX 20MPR24 S3, 3/pkg

*Available in 10K, 50K, 300K - 750K and 0.1 μ m - 0.45 μ m

Replace XXX with:

003 for 3K 100 for 100K 910 for 0.1 μ m

005 for 5K 300 for 300K 920 for 0.2 μ m

010 for 10K 500 for 500K 945 for 0.45 μ m

030 for 30K 750 for 750K 965 for 0.65 μ m

050 for 50K

SPECIFICATIONS

Cartridge Dimensions

2.70" (6.86 cm) x 26.50" (67.30 cm)

Membrane Surface Area

14.00 ft² (1.3 m²)

Molecular Weight Cut-off

3K, 5K, 10K, 30K, 50K, 100K, 300K, 500K, 750K

Membrane Pore Size

0.1 μ m, 0.2 μ m and 0.45 μ m, 0.65 μ m

Fiber ID

0.5 mm, 1.0 mm, 2.0 mm

MATERIALS OF CONSTRUCTION

The cartridge as assembled is USP Class VI compliant.

Membrane

Modified Polyethersulfone (m-PES)

Housing

White Polysulfone

Encapsulant

Epoxy

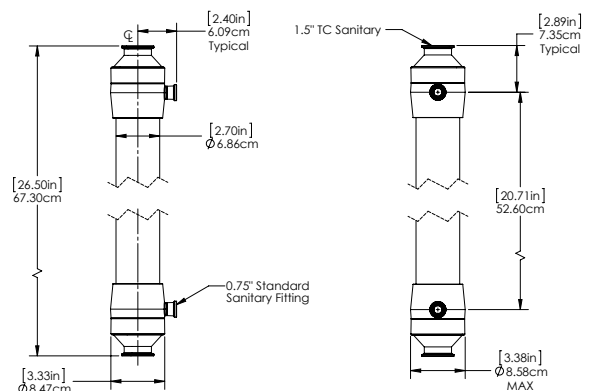
CONNECTIONS

Feed/Retentate

1.5" TC Standard Sanitary Fitting

Permeate

0.75" TC Standard Sanitary Fitting



Technical Support: experttalk@watersep.net
or call 508.970.0089 x 204.