

Researcher12 Green

Single Use Gamma Irradiated Hollow Fiber Cartridges. Easy and Reliable



The **Researcher Green** crossflow hollow fiber membrane cartridges are designed for pilot scale and small scale production. It is the perfect tool for process development. With a surface area of 444 cm², the **Researcher12 Green** can accommodate batch volumes that range from 400 ml to 2,000 ml with a typical permeate flow rate of 1.3-2.7L/hr for ultrafiltration applications and 0.89-1.8 L/hr for microfiltration applications.

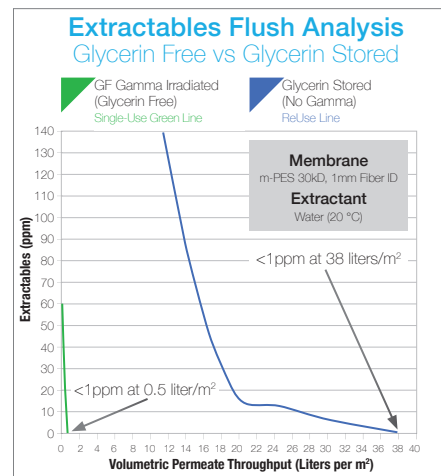
The **Researcher Green** cartridges utilize WaterSep's antifouling, low binding, modified polyethersulfone membrane (m-PES) which provides a process flux and product recovery that exceeds other crossflow devices.

The **Researcher12 Green** 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.

Researcher Green cartridges are also offered as part of fully integrated open architecture single use crossflow assemblies available with pressure sensors, flow meters, pumps, aseptic connectors and/or bags.

The **Researcher12 Green** cartridges offer a true single use crossflow system that provides:

- Significant cost savings over traditional cassette formats.
- Gamma irradiated - ready to use - no pre-rinse.
- No humectants - 80% less extractables, see [Extractables Flush Analysis](#).
- No need for time-consuming cleaning validation.
- Reduced risk of cross contamination.
- Consistent membrane performance batch to batch.
- Self-contained – no assembly – no expensive hardware – no membrane installation.
- Every HF cartridge is integrity tested and has an individual lot number for easy traceability.



TYPICAL APPLICATIONS

- Clarification of **mammalian/CHO** cell cultures and maximizing **protein recovery**.
- **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 and diafiltration of **gene therapy** products.
- Concentration/diafiltration of **monoclonal antibodies, recombinant proteins, biological macromolecules and peptides**.

Researcher12 Green

ORDERING INFORMATION

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

Researcher12 Green HF Cartridge

0.5 mm Fiber ID*

SU XXX 05RES12 S3, 3/pkg

SU XXX 05RES12 S6, 6/pkg

*Not made in 0.65 μ m

1.0 mm Fiber ID

SU XXX 10RES12 S3, 3/pkg

SU XXX 10RES12 S6, 6/pkg

2.0 mm Fiber ID*

SU XXX 20RES12 S3, 3/pkg

SU XXX 20RES12 S6, 6/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

0.75" (1.91 cm) x 12.28" (31.20 cm)

Membrane Surface Area

0.478 ft² (444 cm²)

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

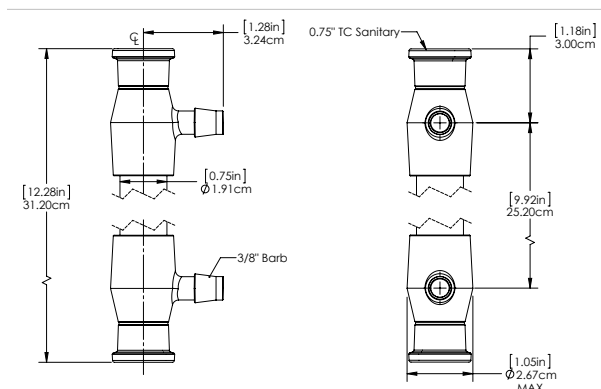
CONNECTIONS

Feed/Retentate

0.75" TC Sanitary Fitting

Permeate

3/8" Hose Barb



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