

## Investigator12 Green

### Single Use Gamma Irradiated Hollow Fiber Cartridges. Easy and Reliable



The **Investigator Green** crossflow hollow fiber membrane cartridges are designed for pilot scale and small scale production and is the perfect tool for process development. With a surface area of 0.13 m<sup>2</sup>, the **Investigator12 Green** can accommodate batch volumes that range from 1L to 6L with a typical permeate flow rate of 3.9 to 7.8 L/hr for ultrafiltration applications and 2.6 to 5.2 L/hr for microfiltration applications.

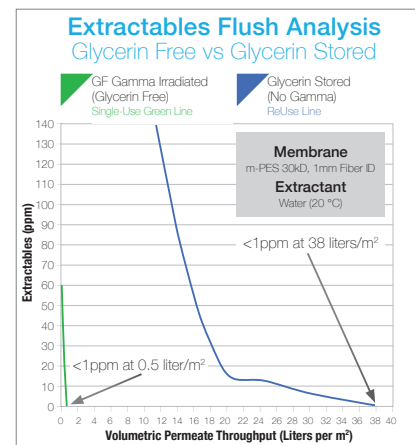
The **Investigator Green** cartridges utilize WaterSep's well accepted antifouling, low binding, modified polyethersulfone membrane (m-PES) which provides a process flux and product recovery that often exceeds other crossflow devices.

The **Investigator12 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.

**Investigator 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 **Investigator12 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, providing maximum 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**.

## Investigator12 Green

### ORDERING INFORMATION

Place orders online at [www.watersep.net](http://www.watersep.net), or email purchase orders to [orders@watersep.net](mailto:orders@watersep.net), sales order confirmation to follow.

#### Investigator12 Green HF Cartridge

0.5 mm Fiber ID\*

SU XXX 05INV12 S3, 3/pkg

SU XXX 05INV12 S6, 6/pkg

\*Not made in 0.65  $\mu$ m

1.0 mm Fiber ID

SU XXX 10INV12 S3, 3/pkg

SU XXX 10INV12 S6, 6/pkg

1.40 ft<sup>2</sup>, (0.13 m<sup>2</sup>)

2.0 mm Fiber ID\*

SU XXX 20INV12 S3, 3/pkg

SU XXX 20INV12 S6, 6/pkg

\*Available in 10K, 50K, 300K - 750K and 0.1  $\mu$ m - 0.45  $\mu$ m

Replace XXX with:

003 for 3K	100 for 100K	910 for 0.1 $\mu$ m
005 for 5K	300 for 300K	920 for 0.2 $\mu$ m
010 for 10K	500 for 500K	945 for 0.45 $\mu$ m
030 for 30K	750 for 750K	965 for 0.65 $\mu$ m

050 for

### SPECIFICATIONS

#### Cartridge Dimensions

1.32" (3.34 cm) x 12.01" (30.50 cm)

#### Membrane Surface Area

1.40 ft<sup>2</sup> (0.13 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

0.5 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

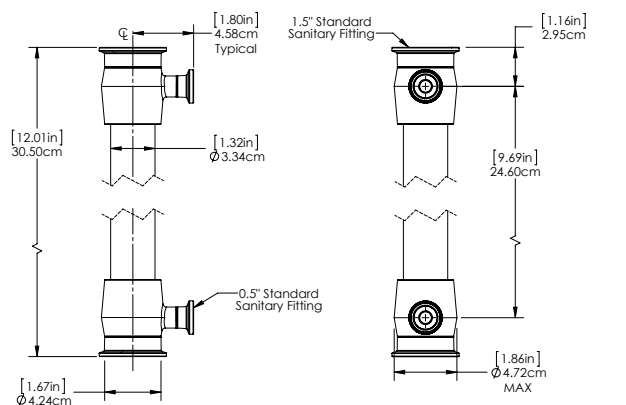
### CONNECTIONS

#### Feed/Retentate

1.5" TC Standard Sanitary Fitting

#### Permeate

0.5" TC Standard Sanitary Fitting



Technical Support: [experttalk@watersep.net](mailto:experttalk@watersep.net)  
or call 508.970.0089 x 204.