

## Discover12 ReUse

ReUsable Hollow Fiber Cartridges  
Easy and Reliable



The **Discover12 ReUse** hollow fiber membrane cartridges are the cartridges of choice for small scale preparative protein and virus concentration/diafiltration and cell clarification. The **Discover12 ReUse** cartridges are the ideal tool for membrane screening utilizing different membrane cut-offs and pore sizes.

The **Discover12 ReUse** cartridges are recommended for sample volumes between 20 and 250 ml, with a final retentive volume of less than 5 ml. The membrane surface area is 52 cm<sup>2</sup>, providing a permeate flow rate of up to 260 ml/hr.

The **Discover12 ReUse** cartridges are made with WaterSep's low binding, antifouling, modified polyethersulfone membrane (m-PES), which typically provides higher process flux and improved product recovery, compared to most other cross flow devices. Membranes are available with molecular weight cut-offs (MWCO) that range from 3K to 750K Dalton, and in pore sizes from 0.1 μm to 0.65 μm, with Lumen ID's of 0.5 mm, 1.0 mm and 2.0 mm. For most applications we recommend 0.5 mm or 1.0 mm ID.

The 12" (30 cm) fluid path length is similar to all other WaterSep 12" hollow fiber HF cartridges which makes scale up/scale down easy and predictable.

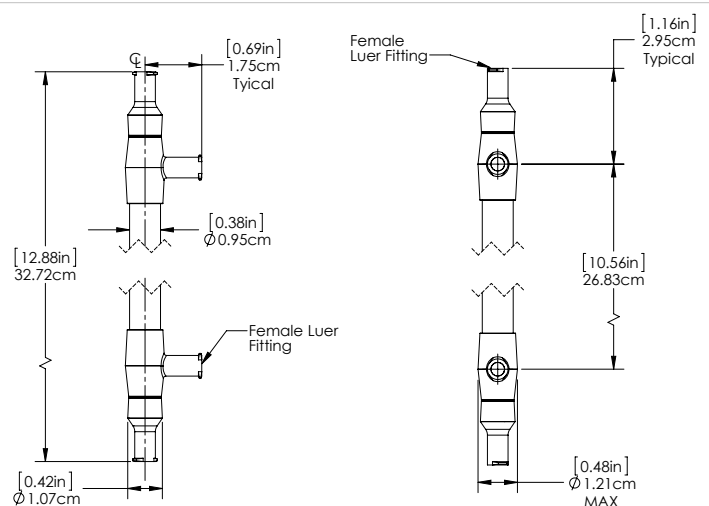
The **Discover12 ReUse** cartridges can be sanitized and cleaned in 0.5-1.0 N NaOH, and stored in 0.1 N NaOH between uses.

For those applications where re-use is acceptable, the **Discover12 ReUse** cartridges offer:

- Self-containment – no assembly – ease of use.
- Low hold-up volume.
- High product flux and total capacity.
- Robust, strong, multi-use hollow fiber membranes.
- Low binding m-PES membrane - high yield and easy to clean.
- A complete membrane offering between 3K and 750 K MWCO and between 0.1 μm and 0.65 μm.
- Consistent membrane performance batch-to-batch.
- 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.



## Discover12 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  $\mu\text{m}$ .

#### WA XXX 05DIS12 LL

Discover12 ReUse HF Cartridge

0.06 ft<sup>2</sup>, (52 cm<sup>2</sup>)

0.5 mm ID

1/pkg

#### WA XXX 10DIS12 LL

Discover12 ReUse HF Cartridge

0.06 ft<sup>2</sup>, (52 cm<sup>2</sup>)

1 mm ID

1/pkg

#### WA XXX 20DIS12 LL

Discover12 ReUse HF Cartridge,

0.06 ft<sup>2</sup>, (52 cm<sup>2</sup>)

2 mm ID

1/pkg

### SPECIFICATIONS

#### Cartridge Dimensions

12.88" (32.72 cm) x 0.38" (0.95 cm)

#### Membrane Surface Area

0.06 ft<sup>2</sup> (52 cm<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

Female Luer Lok Fitting

#### Permeate

Female Luer Lok Fitting