

## Discover™ 41 ReUse

### ReUsable Hollow Fiber Cartridges

### High Flux — Consistent Results



The Discover™ 41 ReUse hollow fiber membrane cartridges are the cartridges of choice for small scale protein and virus concentration/diafiltration and cell clarification. The Discover™ 41 ReUse cartridges are the ideal tool for membrane screening utilizing different membrane cut-offs and pore sizes.

The Discover™ 41 ReUse cartridges are recommended for sample volumes between 80 mL and 850 mL with a total holdup volume of less than 29 mL. The membrane surface area for the Discover™ 41 ReUse cartridge is 193 cm<sup>2</sup> providing a permeate flow rate for ultrafiltration processes of up to 1160 mL/hr.

The Discover™ 41 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 crossflow devices. Membranes are available with molecular weight cut-offs (MWCO) that range from 3K to 750K and in pore sizes from 0.1 μm to 0.65 μm, with lumen IDs 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 41" fluid path length of the Discover™ 41 ReUse cartridges is similar to all other WaterSep 41" hollow fiber cartridges which makes scale up easy and predictable.

The Discover™ 41 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 cleaning and reuse is acceptable, the Discover™ 41 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 from 3K to 750K MWCO and from 0.1 μm to 0.65 μm.
- Consistent membrane performance batch-to-batch.
- Easy and reliable scale up.

### TYPICAL APPLICATIONS

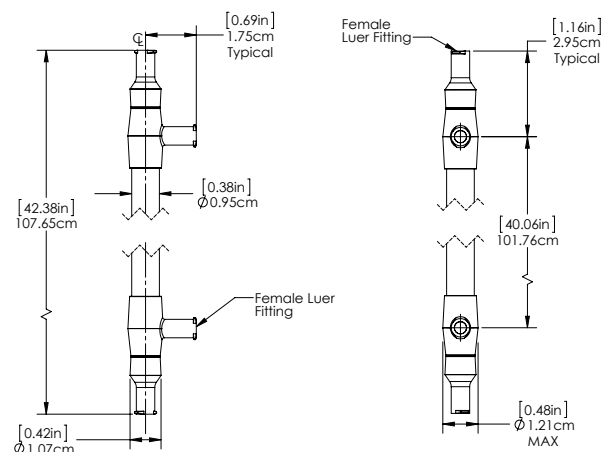
Clarification of cell cultures and fermentation suspensions in primary recovery applications.

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 and diafiltration of gene therapy products.

Concentration/diafiltration of monoclonal antibodies, recombinant proteins, biological macromolecules and peptides.



## Discover™ 41 ReUse

### 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.

#### Discover™ 41 ReUse HF Cartridge

0.5 mm Fiber ID

WA XXX 05DIS41 LL, 1/pkg

WA XXX 05DIS41 L6, 6/pkg

1 mm Fiber ID

WA XXX 10DIS41 LL, 1/pkg

WA XXX 10DIS41 L6, 6/pkg

2 mm Fiber ID

WA XXX 20DIS41 LL, 1/pkg

WA XXX 20DIS41 L6, 6/pkg

\*Available in 10K, 50K, 300K-750K and 0.1µm-0.65µm

Replace XXX with:

003 for 3K	100 for 100K	910 for 0.1µm
005 for 5K	300 for 300K	920 for 0.2µm
010 for 10K	500 for 500K	945 for 0.45µm
030 for 30K	750 for 750K	965 for 0.65µm
050 for 50K		

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

### SPECIFICATIONS

Cartridge Dimensions  
0.38" (0.95 cm) x 42.38" (107.65 cm)

Membrane Surface Area  
0.208 ft<sup>2</sup> (193 cm<sup>2</sup>)

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

Membrane Pore Size  
0.1µm 0.2µm, 0.45µm and 0.65µm

Fiber ID  
0.5mm, 1.0mm, 2.0mm

### MATERIALS OF CONSTRUCTION

The cartridge as assembled is USP Class VI compliant.

Membrane  
Modified Polyethersulfone (m-PES)

Housing  
White Polysulfone

Encapsulant  
Medical Grade Epoxy

### CONNECTIONS

Feed/Retentate  
Female Luer Lok Fitting

Permeate  
Female Luer Lok Fitting