Discover™ 12 ReUse

ReUsable Hollow Fiber Cartridges
High Flux — Consistent Results

The Discover™ 12 ReUse hollow fiber membrane cartridges are the cartridges of choice for small scale protein and virus concentration/diafiltration and cell clarification. The Discover™ 12 ReUse cartridges are the ideal tool for membrane screening utilizing different membrane cut-offs and pore sizes.

The Discover™ 12 ReUse cartridges are recommended for sample volumes between 10 mL and 250 mL, with a total hold up volume of less than 8 mL. The membrane surface area is 52 cm², providing a permeate flow rate for ultrafiltration processes of up to 310 mL/hr.

The Discover™ 12 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 0.1μm to 0.65μm, with lumen IDs of 0.5 mm, 1.0 mm and 2.0 mm. For most applications we recommend a 0.5 mm or 1.0 mm ID.

The 12” fluid path length of the Discover™ 12 ReUse cartridges is similar to all other WaterSep 12” hollow fiber cartridges which makes scale up easy and predictable.

The Discover™ 12 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™ 12 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 750K MWCO and between 0.1μm and 0.65μm.
- 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™ 12 ReUse

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

Discover™ 12 ReUse HF Cartridge
0.5 mm Fiber ID
WA XXX 05DIS12 LL, 1/pkg
WA XXX 05DIS12 L6, 6/pkg

1 mm Fiber ID
WA XXX 10DIS12 LL, 1/pkg
WA XXX 10DIS12 L6, 6/pkg

2 mm Fiber ID
WA XXX 20DIS12 LL, 1/pkg
WA XXX 20DIS12 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

SPECIFICATIONS
Cartridge Dimensions
0.38" (0.95 cm) x 12.88" (32.72 cm)

Membrane Surface Area
0.056 ft² (52 cm²)

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

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