

Discover™ 24 ReUse

ReUsable Hollow Fiber Cartridges

High Flux — Consistent Results



The **Discover™ 24 ReUse** hollow fiber membrane cartridges are the cartridges of choice for small scale protein and virus concentration/diafiltration and cell clarification. The **Discover™ 24 ReUse** cartridges are the ideal tool for membrane screening utilizing different membrane cut-offs and pore sizes.

The **Discover™ 24 ReUse** cartridges are recommended for sample volumes between 50 mL and 400 mL, with a total hold up volume of less than 16 mL. The membrane surface area for the **Discover™ 24 ReUse** cartridge is 107 cm² providing a permeate flow rate for ultrafiltration processes of up to 640 mL/hr.

The **Discover™ 24 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 Dalton, and in pore sizes from 0.1 μm to 0.45 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 24" fluid path length of the **Discover™ 24 ReUse** cartridges is similar to all other WaterSep 24" hollow fiber HF cartridges which makes scale up easy and predictable.

The **Discover™ 24 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™ 24 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 0.45 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™ 24 ReUse

ORDERING INFORMATION

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

Discover™ 24 ReUse HF Cartridge

0.5 mm Fiber ID

WA XXX 05DIS24 LL, 1/pkg

WA XXX 05DIS24 L6, 6/pkg

1 mm Fiber ID

WA XXX 10DIS24 LL, 1/pkg

WA XXX 10DIS24 L6, 6/pkg

2 mm Fiber ID

WA XXX 20DIS24 LL, 1/pkg

WA XXX 20DIS24 L6, 6/pkg

*Available in 10K, 50K, 300K-750K and 0.1 μ m - 0.45 μ m

Replace XXX with:

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

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

SPECIFICATIONS

Cartridge Dimensions
0.38" (0.95 cm) x 24.38" (61.93 cm)

Membrane Surface Area
0.115 ft² (107cm²)

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

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