# WaterSep\*

### Explorer41 ReUse



The Explorer41 ReUse hollow fiber membrane cartridges are designed for medium scale biopharmaceutical laboratory applications for volumes that range from 300 ml to 3,000 ml, with a final retentive volume of less than 35 ml. The Explorer41 ReUse cartridges are recommended for concentration/diafiltration of peptides enzymes, proteins, antibodies and viruses as well as harvest and clarification of bacteria and cells.

The Explorer41 ReUse cartridges have a membrane surface area of 580 cm<sup>2</sup>, providing a permeate flow rate of up to 2,900 ml/hr.

The Explorer41 ReUse cartridges incorporates 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.

The Explorer41 ReUse cartridges are available with molecular weight cut-offs (MWCO) that range from 3K to 750K Dalton, and in pore sizes from 0.1  $\mu$ m to 0.65  $\mu$ m, 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 fluid path length for the Explorer41 ReUse cartridges is similar to all other WaterSep 41" (104 cm) hollow fiber cartridges making scale up/scale down very easy and predictable.

The Explorer41 ReUse cartridges can be sanitized and cleaned in 0.5-1.0 N NaOH, and stored in 0.1 N NaOH between uses.

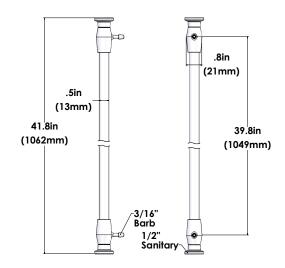
#### ReUsable Hollow Fiber Cartridges

For those applications where re-use is acceptable, the Explorer41 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  $\mu$ m and 0.65  $\mu$ m.
- Consistent membrane performance batch-tobatch.
- · 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.



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## **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  $\mu$ m, 920 for 0.2  $\mu$ m, 945 for 0.45  $\mu$ m.and 965 for 0.65  $\mu$ m.

#### WA XXX 05EXP41 SO

Explorer41 ReUse HF Cartridge 0.62 ft<sup>2</sup>, (580 cm<sup>2</sup>) 0.5 mm ID 1/pkg

#### WA XXX 10EXP41 SO

Explorer41 ReUse HF Cartridge 0.62 ft<sup>2</sup>, (580 cm<sup>2</sup>) 1 mm ID 1/pkg

#### WA XXX 20EXP41 SO

Explorer41 ReUse HF Cartridge, 0.62 ft<sup>2</sup>, (580 cm<sup>2</sup>) 2 mm ID 1/pkq

#### **SPECIFICATIONS**

Cartridge Dimensions 41.8." (106.2 cm) x .5" (1.27 cm)

Membrane Surface Area 0.62 ft<sup>2</sup> (580 cm<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 0.5mm, 1.0mm, 2.0mm

#### MATERIALS OF CONSTRUCTION

Membrane Modified Polyethersulfone (m-PES)

Housing White Polysulfone

Encapsulant
USP Class VI - Compliant Epoxy

#### CONNECTIONS

Feed/Retentate 0.5" TC

Permeate 3/16" Barb