



# ConSep® 3000 Filter Holder and Module

## Ideal for laboratory and pilot plant!

The ConSep 3000 is the perfect laboratory / pilot plant module designed to match the downstream processing needs of 2 to 100L bioreactors / fermentors. With low hold-up volume and all of the design functionality of the production scale ConSep 11000, this module allows you to perform small-scale batches with production scale fluid dynamics. With the ConSep 3000 you are assured that your process development efforts will provide effortless future scale up. The ConSep 3000 module and holder provide optimum performance for solutions ranging from dilute proteins to viscous cell broths. Incorporating the patented *SmartFlow*® technology, ConSep filter modules offer improved fluid dynamics providing true linear scalability, optimized yields, decreased downstream process time, and lower costs.

ConSep filter modules are available in a broad range of membrane pore sizes and polymers, making the ConSep 3000 an exceptional laboratory and pilot scale instrument suited for process development solutions including algae harvest, product concentration, and buffer exchange for final packaging. ConSep *SmartFlow* modules provide the filtration technology that will meet your process requirements and deliver significant improvements to your downstream productivity.

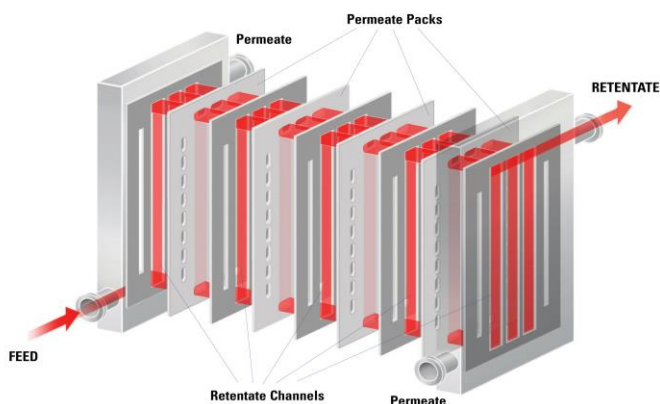
## Support

In addition to its market-leading filter modules, SmartFlow offers Applications and Technical Support. These programs provide experienced and dedicated application specialists, process engineers, and validation support engineers to assist you with process development and process optimization programs as well as integrating PuroSep® systems and ConSep filter modules into your process so that you can more easily and quickly realize the benefits provided by SmartFlow-TFF.

- **Patented *SmartFlow*® technology for improved fluid dynamics**
- **Accurate scale up to production TFF systems or scale down for process optimization**
- **Widest range of membrane materials and pore sizes for MF, UF and NF and low pressure RO applications**
- **Easy to clean and cost effective for reproducible results regardless of scale**
- **Higher yields from improved design and better fluid dynamics**

## Specifications

<b>Standard Membrane Ranges Available</b>	Regenerated Cellulose: 10,30, 100 kDa Polyethersulfone: 4 – 1000 kDa Nylon: 0.1 – 0.8µm Composite materials: NF and low pressure RO  <b>Contact SmartFlow Technologies for a complete list of membranes available for the ConSep® 3000 Holder</b>
<b>Volume Range</b>	2L to 100L
<b>Internal dead volume</b>	Approximately 40ml (depending on module selected and configuration)
<b>Pressure rating</b>	150 psig (10.3 Bar)
<b>Standard Holder Connections</b>	Inlet and Outlet: 3/4" TC Pressure gauge ports: 1/2" TC Two 3/4" TC permeate ports
<b>Standard Channel Heights</b>	0.375mm, 0.5mm, 0.65mm, 0.75mm, 0.875mm, 1.0mm, 1.5mm, 2.0mm, 3.0mm
<b>Membrane Area (Two Module Sizes Available)</b>	0.1 m <sup>2</sup> (1.0 ft <sup>2</sup> )      0.19 m <sup>2</sup> (2.0 ft <sup>2</sup> ) ** Modules are stackable in both parallel and series flow paths.
<b>Component Material</b>	Based on supplier information, no critical components contain material from an animal origin. All material utilized in module manufacture requires an approved and acceptable certificate of conformance from the supplier, including successful test reports.
<b>Integrity Testing</b>	All SmartFlow Technologies modules must pass an approved integrity testing procedure based on air diffusion through a wetted module.



### ConSep 3000 Holder and Modules

Description	Catalogue Number
ConSep 3000 Holder 3/4" TC Inlet / Outlet	60-900-2075
ConSep 3000 Filter Module 0.1 m <sup>2</sup> (1.0 ft <sup>2</sup> )	61-XXX-XXXX
ConSep 3000 Filter Module 0.19 m <sup>2</sup> (2.0 ft <sup>2</sup> )	62-XXX-XXXX

#### **SmartFlow® TFF: "Delivering the promise of TRUE TFF Functionality"**

The *SmartFlow*® performance advantage comes from the patented *SmartFlow* tangential flow filtration technology. The *SmartFlow* technology in the ConSep® filter module is comprised of two primary developments: 1) unique flow channels and 2) diagonally opposed inlet and outlet ports provide uniform fluid dynamics. These advancements allow for consistent fluid distribution across the entire membrane surface. The benefits of *SmartFlow* technology include: improved cleaning, increased flux rate, true linear scalability, and increased yields resulting in more efficient downstream processes than in traditional TFF.

**To Place an Order or Receive Additional Information, please contact our global headquarters:**

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