

**Molsep : high temperature and pressure resistant hollow fibre cartridges /  
Intersep Filtration Systems.**

**Contributors**

Intersep Filtration Systems.

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# Molsep<sup>®</sup>

High Temperature and  
Pressure Resistant  
Hollow Fibre Cartridges



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## Molsep® Hollow Fibre Cartridges

Molsep® Hollow Fibre cartridges are available in a standard sanitary design with a choice of membrane pore sizes and surface areas. The unique double skinned structure of Molsep® hollow fibres offer high resistance to elevated temperatures and pressures. The units are also highly chemical and pH resistant and offer high flow characteristics.

### Principle

Microporous hollow fibres are bundled together and sealed within a cartridge. The solution to be filtered is pumped through the cartridge, passing through the lumen of the fibres, being re-circulated in a cross-flow mode. Solutes and solvents with a molecular-weight cut-off smaller than the rated pore-size pass through the membrane and are collected via ports within the housing. Hollow fibres are employed to enable the use of a large membrane surface area within a relatively compact cartridge. Suitable for low to moderate levels of particulate suspension.

### Applications

- Bioprocessing.
- End product separation / purification.
- Cell washing / buffer exchange.
- Purification of enzymes / proteins / polysaccharides.
- Separation of flavourings / essences from crude extracts.
- Concentration of hazardous materials prior to disposal.
- Recovery of valuable by-products.
- Preparation of ultra-pure pyrogen free water.

The unique double-skinned hollow fibre structure of Molsep®



### Features

- Unique double skinned membrane offers high temperature (98°C) and pressure resistance.
- High flow characteristics.
- Easily sterilisable by a wide variety of standard methods including autoclaving and in-line steam.
- Wide pH and chemical resistance.
- Available with a wide range of pore sizes.
- Built to the highest quality specification.
- Conforms to USP XXI Class VI Biosafety Standards.
- Available in sanitary design with standard clamp connectors.

### Specifications

Pore Size (NMWCO)	10, 30, 100, 150K Dalton
Surface Areas	2.3 - 8.3m <sup>2</sup>
Fibre Inner Diameter	400-800µm
Max. Feed Pressure	6 Bar
Max. Transmembrane Pressure	3 Bar
Water Flux (measured with distilled water at 25°C and 3 Bar)	240-750 l/m <sup>2</sup> h
Max. Temperature	98°C
pH Range	1 - 14
Membrane	Polyethersulphone (PES)
Case	Polysulphone
O Ring	PTFE
Adhesive	Epoxy resin
Connections	Sanitary clamps throughout

### Ordering Information

NMWCO (kDaltons)	Product Code	Membrane Surface Area	Fibre Internal Diameter	Water Flux l/m <sup>2</sup> h	Membrane
10	04102083	8.3 m <sup>2</sup>	500µm	240	PES
30	04103053	5.3 m <sup>2</sup>	800µm	500	PES
30	04103082	8.2 m <sup>2</sup>	500µm	420	PES
100	04110023	2.3 m <sup>2</sup>	400µm	580	PES
150	04115053	5.3 m <sup>2</sup>	800µm	750	PES

\* 0.5 M<sup>2</sup> LABORATORY TEST UNITS ARE AVAILABLE UPON REQUEST

Distributed by:

In the U.S. Intersep Inc., Carriage Lane Place, PO Box 560,  
Cazenovia, New York 13035-0560  
Tel: 1-315-655-4900 Fax: 1-315-655-4076

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FILTRATION SYSTEMS

Brook House, Molly Millars Bridge,  
Wokingham, Berkshire RG11 2RZ, UK

Tel: (0734) 795566 Fax: (0734) 795186

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