

# TRISEP® PS Pharmaceutical MP005 Series



TRISEP® PS sanitary membrane elements for pharmaceutical applications have a long history of outstanding, stable field performance. NADIR® MP005 polyethersulfone (PES) microfiltration membrane with a nominal 0.05 µm pore size offers consistent performance for applications requiring a PES MF membrane. PS elements are available with a number of different feed spacers and in all sizes common in the industry.

## MEMBRANE CHARACTERISTICS

<b>Membrane</b>	NADIR® MP005
<b>Membrane Type</b>	Polyethersulfone (PES)
<b>Nominal Pore Size (µm)</b>	0.05

## DESIGN INFORMATION

<b>Model</b>	<b>Membrane Area m<sup>2</sup> (ft<sup>2</sup>)</b>	<b>Feed Spacer Thickness (mil)<sup>a</sup></b>
<b>TRISEP® PS MP005 8438-80</b>	21.2 (228)	80

<sup>a</sup> All models on this sheet have a netting outer wrap and diamond shaped feed spacers.

## OPERATING PARAMETERS

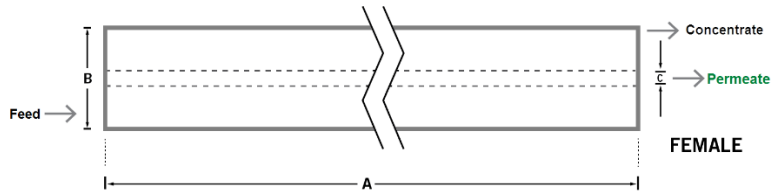
<b>Maximum Operating Pressure</b>	10 bar (145 psi)
<b>Maximum Operating Temperature</b>	55°C (131°F)
<b>Cleaning pH Range<sup>1</sup></b>	1.0 - 12.0
<b>Cleaning Chlorine Tolerance</b>	200 ppm for sanitization at pH ≥ 10.5
<b>Maximum Pressure Drop</b>	1 bar (15 psi) per element; 4 bar (60 psi) per housing

<sup>1</sup> Refer to temperature and pH limits in our Membrane Cleaning Guides.

**PHYSICAL DIMENSIONS**

Model	Element Weight kg (lb) <sup>b</sup>	Dim. A mm (inches)	Dim. B mm (inches)	Dim. C <sup>c</sup> mm (inches)	Permeate Tube
TRISEP® PS MP005 8438-80	18 (40)	965 (38.0)	212 (8.34)	31.15 (1.226)	Female

b Shipping weight is dependent on packaging material and quantity shipped.  
 c Dimension "C" is the Inner Diameter.



**IMPORTANT INFORMATION**

- Start-up:** MANN+HUMMEL Water & Fluid Solutions recommends flushing elements for 30 minutes at low pressure and discarding permeate during the flush prior to operation. For a more detailed start-up procedure, please see Element Start-Up Guide – System Start-Up (TSG-O-005).
- Cleaning:** TRISEP® membrane elements must be cleaned periodically to ensure proper operation and to prevent membrane damage. Please see our Membrane Cleaning Guides.
- Storage:** TRISEP membrane elements must be stored appropriately to ensure proper operation and to prevent membrane damage. Please see Element Storage Guides (TSG-O-009 & TSG-O-010).
- Regulatory:** All models on this sheet conform to USDA 3A sanitary standard 45-03, use FDA (CFR Title 21) compliant materials, comply with EU regulation (EC) No. 1935/2004 and No. 10/2011, and have Halal and Kosher certifications.

**CUSTOMIZABLE SPECIALTY ELEMENTS**

MANN+HUMMEL Water & Fluid Solutions offers a full range of membranes and element designs for challenging water and process applications. Technologies include low-fouling RO, submerged UF, continuous high temperature, ultra-high pressure, unique sanitary designs and more. Contact us to customize a product that satisfies your specific requirements.

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