



# TRISEP® PS Pharmaceutical NP030 Series

TRISEP® PS sanitary membrane elements for pharmaceutical applications have a long history of outstanding, stable field performance. NADIR® NP030 polyethersulfone (PES) membrane exhibits nanofiltration properties and a molecular weight cut-off in the range of 500 – 600 Da after a high-pressure stabilization, offering unique separation properties for process applications. PS elements are available with a number of different feed spacers and in all sizes common in the industry. TRISEP PS elements are built with FDA compliant materials, are compliant with European food regulations (EU 10/2011 and EC 1935/2004), and comply with both USDA and BSE/TSE standards.

## Membrane Characteristics

Membrane	Nominal M.W.C.O. (Da)	Na <sub>2</sub> SO <sub>4</sub> Salt Rejection (%) <sup>a</sup>
NADIR® NP030	500 – 600	80 - 95

Maximum Operating Pressure.....	40 bar (580 psi)
Maximum Operating Temperature.....	50°C (122°F)
Cleaning pH Range <sup>1</sup> .....	1.0 – 12.0
Cleaning Chlorine Tolerance .....	200 ppm for sanitization at pH ≥ 10.5
Maximum Pressure Drop .....	1 bar (15 psi) per element 4 bar (60 psi) per housing

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

## Design Information

MICRODYN-NADIR has the versatility to customize elements to meet customers' specific needs. Please contact MICRODYN-NADIR for information on customized solutions.

Model	Membrane Area m <sup>2</sup> (ft <sup>2</sup> )	Feed Spacer Thickness (mil) <sup>a</sup>
TRISEP® PS NP030 3838B	7.0 (75)	31
TRISEP® PS NP030 3838C	5.7 (61)	46
TRISEP® PS NP030 6338B	20.5 (221)	31
TRISEP® PS NP030 6338C	17.1 (184)	46
TRISEP® PS NP030 6338F	11.5 (124)	80

<sup>a</sup> All models on this sheet are net wrapped and have diamond shaped feed spacers.



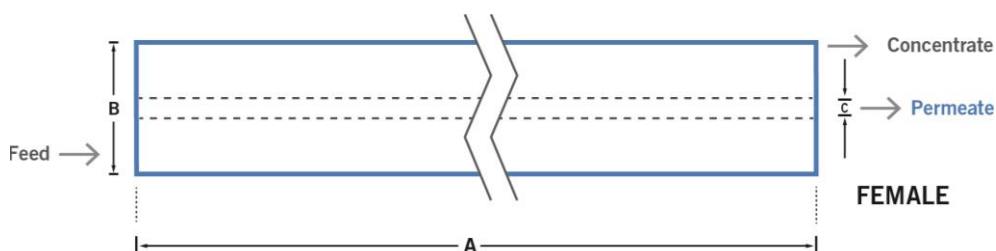
## Product Specification (continued)

### Physical Dimensions

Model	Element Weight kg (lbs) <sup>b</sup>	Dimensions, mm (inches)			Permeate Tube
		A	B	C <sup>c</sup>	
TRISEP® PS NP030 3838B	4 (9)	965 (38.0)	96 (3.8)	21.1 (0.83)	Female
TRISEP® PS NP030 3838C	4 (9)	965 (38.0)	96 (3.8)	21.1 (0.83)	Female
TRISEP® PS NP030 6338B	11 (24)	965 (38.0)	162 (6.3)	28.9 (1.138)	Female
TRISEP® PS NP030 6338C	11 (24)	965 (38.0)	162 (6.3)	28.9 (1.138)	Female
TRISEP® PS NP030 6338F	11 (24)	965 (38.0)	162 (6.3)	28.9 (1.138)	Female

<sup>b</sup> Shipping weight is dependent on packaging material and quantity shipped.

<sup>c</sup> Dimension "C" is the Inner Diameter.



### Important Information

- Start-up:** MICRODYN-NADIR 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).

### Customizable Specialty Elements

MICRODYN-NADIR 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 MICRODYN-NADIR to customize a product that satisfies your specific requirements.

## Solving Unmet Needs with Customized Products



Headquarters  
MICRODYN-NADIR GmbH  
Building D512  
Kasteler Straße 45  
65203 Wiesbaden  
Germany  
info@microdyn-nadir.de  
www.microdyn-nadir.de

USA Office  
MICRODYN-NADIR US, Inc.  
93 South La Patera Lane  
Goleta, CA 93117  
USA  
info@microdyn-nadir.com  
www.microdyn-nadir.com/en  
www.microdyn-nadir.com/trisep

China Office  
MICRODYN-NADIR (Xiamen) Co. Ltd.  
No. 66 Jinting North Road Xinglin  
Xiamen, China 361022  
infochina@microdyn-nadir.com

Singapore Office  
MICRODYN-NADIR Singapore Pte. Ltd.  
18 Tuas Avenue 8  
Singapore 639233  
info@microdyn-nadir.com