



TRISEP® DS Food & Dairy

UP150 Series

TRISEP sanitary membrane elements for food & dairy applications have a long history of outstanding, stable field performance. NADIR® UP150 polyethersulfone (PES) membrane with a nominal 150,000 Da molecular weight cut-off offers consistently high flux rates. TRISEP elements are available with a number of different feed spacers and in all sizes common in the industry. TRISEP DS elements are built with FDA compliant materials, are compliant with European food regulations (EU 10/2011 and EC 1935/2004) and comply with USDA standards.

Membrane Characteristics

Membrane	Nominal M.W.C.O. (Da)
NADIR® UP150	150,000

Maximum Operating Pressure.....	10 bar (145 psi)
Maximum Operating Temperature.....	50°C (122°F)
Cleaning pH Range ¹	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

¹ Refer to temperature and pH limits in *Membrane Cleaning Guide – Food & Dairy: UF & MF Elements (TSG-C-004)*.

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 ² (ft ²)	Feed Spacer Thickness (mil) ^a
TRISEP® DS UP150 4333B	7.6 (82)	31
TRISEP® DS UP150 4333C	6.3 (68)	46
TRISEP® DS UP150 4333F	4.3 (46)	80
TRISEP® DS UP150 6338F	11.5 (124)	80

^a All models on this sheet are net wrapped and have diamond shaped feed spacers.



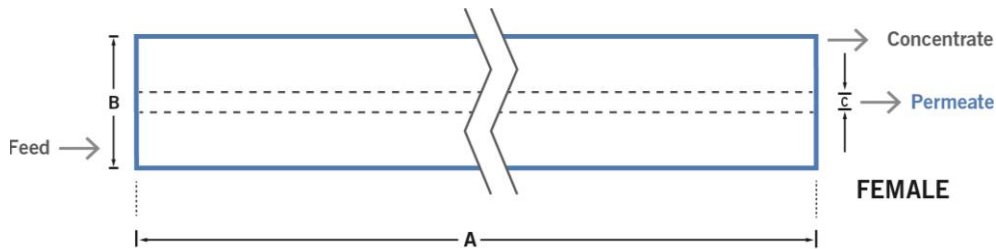
Product Specification (continued)

Physical Dimensions

Model	Element Weight kg (lbs) ^b	Dimensions, mm (inches)			Permeate Tube
		A	B	C ^c	
TRISEP® DS UP150 4333B	4 (9)	838 (33.0)	109.5 (4.3)	21.1 (0.83)	Female
TRISEP® DS UP150 4333C	4 (9)	838 (33.0)	109.5 (4.3)	21.1 (0.83)	Female
TRISEP® DS UP150 4333F	4 (9)	838 (33.0)	109.5 (4.3)	21.1 (0.83)	Female
TRISEP® DS UP150 6338F	11 (24)	965 (38.0)	162 (6.3)	28.9 (1.138)	Female

^b Shipping weight is dependent on packaging material and quantity shipped.

^c 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 *Membrane Cleaning Guide – Food & Dairy: UF & MF Elements (TSG-C-004)*.
- 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/triseip

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