



TRISEP® DS Food & Dairy

UP005XT Series

LENNTECH
WATER TREATMENT SOLUTIONS

TRISEP® XT elements feature a membrane cast on a polypropylene support material capable of being cleaned at high temperature and high pH conditions. NADIR® UP005 polyethersulfone (PES) membrane with a nominal 5,000 Da molecular weight cut-off offers the highest protein rejection in the industry for membranes with this cut-off. In field studies UP005 membrane had as much as 75% less protein passage than competitive membranes. 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	NADIR® UP005
Membrane Type	Polyethersulfone (PES)
Nominal M.W.C.O. (Da)	5,000

DESIGN INFORMATION

Model	Membrane Area m ² (ft ²)	Feed Spacer Thickness (mil) ^a
TRISEP® DS UP005XT 3838-31	7.0 (75)	31
TRISEP® DS UP005XT 3838-46	5.7 (61)	46
TRISEP® DS UP005XT 3838-65	4.5 (48)	65
TRISEP® DS UP005XT 3838-80	4.0 (43)	80
TRISEP® DS UP005XT 6338-31	20.5 (221)	31
TRISEP® DS UP005XT 6338-46	17.1 (184)	46
TRISEP® DS UP005XT 6338-65	12.9 (139)	65
TRISEP® DS UP005XT 6338-80	11.5 (124)	80
TRISEP® DS UP005XT 6438-31	20.5 (221)	31
TRISEP® DS UP005XT 6438-46	17.1 (184)	46
TRISEP® DS UP005XT 6438-65	12.9 (139)	65
TRISEP® DS UP005XT 6438-80	11.5 (124)	80
TRISEP® DS UP005XT 8038-31	32.0 (344)	31
TRISEP® DS UP005XT 8038-46	25.0 (269)	46
TRISEP® DS UP005XT 8038-65	21.0 (226)	65
TRISEP® DS UP005XT 8038-80	18.0 (194)	80
TRISEP® DS UP005XT 8338-31	34.0 (366)	31
TRISEP® DS UP005XT 8338-46	27.5 (296)	46
TRISEP® DS UP005XT 8338-65	23.5 (253)	65
TRISEP® DS UP005XT 8338-80	21.2 (228)	80

^a All models on this sheet have a netting outer wrap and diamond shaped feed spacers.

OPERATING PARAMETERS

Maximum Operating Pressure	10 bar (145 psi)
Maximum Operating Temperature	60°C (140°F)
Maximum Cleaning Temperature	75°C (167°F)
Maximum Sanitization Temperature	85°C (185°F) at 1.7 bar max pressure, pH 6.0 – 8.0

**MANN +
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Cleaning pH Range ¹	1.0 – 13.0
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

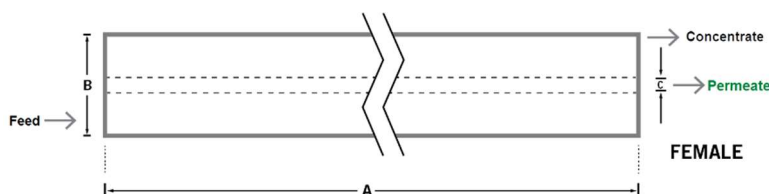
¹ Refer to temperature and pH limits in Membrane Cleaning Guide – Food & Dairy: UF & MF Elements (TSG-C-004).

PHYSICAL DIMENSIONS

Model	Element Weight kg (lb) ^b	Dim. A mm (inches)	Dim. B mm (inches)	Dim. C ^c mm (inches)	Permeate Tube
TRISEP® DS UP005XT 3838-31	4 (9)	965 (38.0)	96 (3.8)	21.1 (0.83)	Female
TRISEP® DS UP005XT 3838-46	4 (9)	965 (38.0)	96 (3.8)	21.1 (0.83)	Female
TRISEP® DS UP005XT 3838-65	4 (9)	965 (38.0)	96 (3.8)	21.1 (0.83)	Female
TRISEP® DS UP005XT 3838-80	4 (9)	965 (38.0)	96 (3.8)	21.1 (0.83)	Female
TRISEP® DS UP005XT 6338-31	11 (24)	965 (38.0)	162 (6.3)	28.9 (1.138)	Female
TRISEP® DS UP005XT 6338-46	11 (24)	965 (38.0)	162 (6.3)	28.9 (1.138)	Female
TRISEP® DS UP005XT 6338-65	11 (24)	965 (38.0)	162 (6.3)	28.9 (1.138)	Female
TRISEP® DS UP005XT 6338-80	11 (24)	965 (38.0)	162 (6.3)	28.9 (1.138)	Female
TRISEP® DS UP005XT 6438-31	11 (24)	965 (38.0)	162 (6.3)	28.9 (1.138)	Female
TRISEP® DS UP005XT 6438-46	11 (24)	965 (38.0)	162 (6.3)	28.9 (1.138)	Female
TRISEP® DS UP005XT 6438-65	11 (24)	965 (38.0)	162 (6.3)	28.9 (1.138)	Female
TRISEP® DS UP005XT 6438-80	11 (24)	965 (38.0)	162 (6.3)	28.9 (1.138)	Female
TRISEP® DS UP005XT 8038-31	16 (36)	965 (38.0)	201 (7.9)	28.9 (1.138)	Female
TRISEP® DS UP005XT 8038-46	16 (36)	965 (38.0)	201 (7.9)	28.9 (1.138)	Female
TRISEP® DS UP005XT 8038-65	16 (36)	965 (38.0)	201 (7.9)	28.9 (1.138)	Female
TRISEP® DS UP005XT 8038-80	16 (36)	965 (38.0)	201 (7.9)	28.9 (1.138)	Female
TRISEP® DS UP005XT 8338-31	18 (40)	965 (38.0)	211 (8.3)	28.9 (1.138)	Female
TRISEP® DS UP005XT 8338-46	18 (40)	965 (38.0)	211 (8.3)	28.9 (1.138)	Female
TRISEP® DS UP005XT 8338-65	18 (40)	965 (38.0)	211 (8.3)	28.9 (1.138)	Female
TRISEP® DS UP005XT 8338-80	18 (40)	965 (38.0)	211 (8.3)	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:** 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 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).
- Regulatory:** All models on this sheet conform to USDA 3A sanitary standard 45-03, use FDA (CFR Title 21) compliant materials, 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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