

TRISEP DS Food & Dairy 10kUF Series

TRISEP sanitary membrane elements for food & dairy applications have a long history of outstanding, stable field performance. TRISEP 10kUF polyethersulfone (PES) membrane with a nominal 10,000 Da molecular weight cut-off offers excellent protein rejection and improved 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	TRISEP 10kUF
Membrane Type	Polyethersulfone (PES)
Nominal M.W.C.O. (Da)	10,000

DESIGN INFORMATION

Model	Membrane Area m ² (ft ²)	Feed Spacer Thickness (mil) ^a
TRISEP DS 10KUF 3838-31	7.0 (75)	31
TRISEP DS 10kUF 3838-46	5.7 (61)	46
TRISEP DS 10KUF 3838-65	4.5 (48)	65
TRISEP DS 10kUF 3838-80	4.0 (43)	80
TRISEP DS 10KUF 4336-46	7.0 (75)	46
TRISEP DS 10kUF 4336-80	4.6 (50)	80
TRISEP DS 10KUF 6338-31	23.2 (250)	31
TRISEP DS 10kUF 6338-46	16.3 (175)	46
TRISEP DS 10kUF 6338-65	13.0 (140)	65
TRISEP DS 10kUF 6338-80	11.1 (120)	80
TRISEP DS 10kUF 6338-80P	11.1 (120)	80P
TRISEP DS 10KUF 6438-31	23.2 (250)	31
TRISEP DS 10kUF 6438-46	16.3 (175)	46
TRISEP DS 10kUF 6438-65	13.0 (140)	65
TRISEP DS 10kUF 7838-31	31.6 (340)	31
TRISEP DS 10kUF 8038-31	37.2 (400)	31
TRISEP DS 10kUF 8038-46	27.9 (300)	46
TRISEP DS 10kUF 8038-65	21.4 (230)	65
TRISEP DS 10kUF 8038-80	18.0 (194)	80
TRISEP DS 10kUF 8338-31	34.0 (366)	31
TRISEP DS 10kUF 8338-46	27.5 (296)	46
TRISEP DS 10kUF 8338-65	23.5 (253)	65
TRISEP DS 10kUF 8338-80	21.2 (228)	80

^a All models on this sheet have a netting outer wrap and diamond shaped feed spacers except for TRISEP DS 10kUF 6338-80P (parallel shaped feed spacer).

OPERATING PARAMETERS

Maximum Operating Pressure	10 bar (145 psi)
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PRODUCT SPECIFICATION – TRISEP DS FOOD & DAIRY

Maximum Operating Temperature	50°C (122°F)
Cleaning pH/Temperature Range¹	1.5 – 11.5 at 50°C (122°F)
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

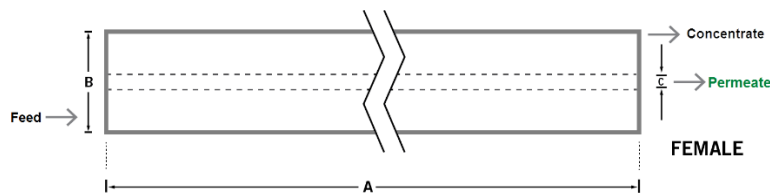
¹ Refer to temperature and pH limits in Membrane Cleaning Guide – Food & Dairy: UF & MF Elements (TSG-C-004).

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 10kUF 3838-31	4 (9)	965 (38.0)	96 (3.8)	21.1 (0.83)	Female
TRISEP DS 10kUF 3838-46	4 (9)	965 (38.0)	96 (3.8)	21.1 (0.83)	Female
TRISEP DS 10kUF 3838-65	4 (9)	965 (38.0)	96 (3.8)	21.1 (0.83)	Female
TRISEP DS 10kUF 3838-80	4 (9)	965 (38.0)	96 (3.8)	21.1 (0.83)	Female
TRISEP DS 10kUF 4336-46	4 (9)	902 (35.5)	109.5 (4.3)	21.1 (0.83)	Female
TRISEP DS 10kUF 4336-80	4 (9)	902 (35.5)	109.5 (4.3)	21.1 (0.83)	Female
TRISEP DS 10kUF 6338-31	11 (24)	965 (38.0)	162 (6.3)	28.9 (1.138)	Female
TRISEP DS 10kUF 6338-46	11 (24)	965 (38.0)	162 (6.3)	28.9 (1.138)	Female
TRISEP DS 10kUF 6338-65	11 (24)	965 (38.0)	162 (6.3)	28.9 (1.138)	Female
TRISEP DS 10kUF 6338-80	11 (24)	965 (38.0)	162 (6.3)	28.9 (1.138)	Female
TRISEP DS 10kUF 6338-80P	11 (24)	965 (38.0)	162 (6.3)	28.9 (1.138)	Female
TRISEP DS 10kUF 6438-31	11 (24)	965 (38.0)	162.5 (6.4)	28.9 (1.138)	Female
TRISEP DS 10kUF 6438-46	11 (24)	965 (38.0)	162.5 (6.4)	28.9 (1.138)	Female
TRISEP DS 10kUF 6438-65	11 (24)	965 (38.0)	162.5 (6.4)	28.9 (1.138)	Female
TRISEP DS 10kUF 7838-31	15 (34)	965 (38.0)	198 (7.8)	28.6 (1.125)	Female
TRISEP DS 10kUF 8038-31	16 (36)	965 (38.0)	201 (7.9)	28.9 (1.138)	Female
TRISEP DS 10kUF 8038-46	16 (36)	965 (38.0)	201 (7.9)	28.9 (1.138)	Female
TRISEP DS 10kUF 8038-65	16 (36)	965 (38.0)	201 (7.9)	28.9 (1.138)	Female
TRISEP DS 10kUF 8038-80	16 (36)	965 (38.0)	201 (7.9)	28.9 (1.138)	Female
TRISEP DS 10kUF 8338-31	18 (40)	965 (38.0)	211 (8.3)	28.9 (1.138)	Female
TRISEP DS 10kUF 8338-46	18 (40)	965 (38.0)	211 (8.3)	28.9 (1.138)	Female
TRISEP DS 10kUF 8338-65	18 (40)	965 (38.0)	211 (8.3)	28.9 (1.138)	Female
TRISEP DS 10kUF 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, 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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