

DairyUF™ 10K Series

High Performance Dairy Process Membranes

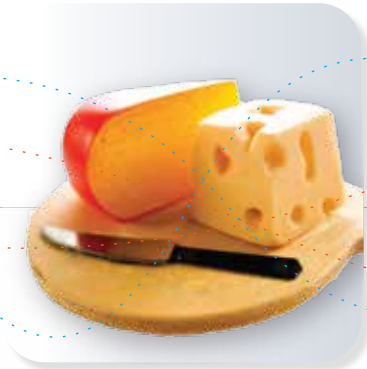
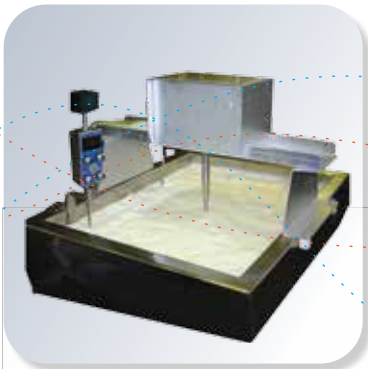
USDA-Accepted High-Flux, 10,000 Dalton, Polyethersulfone Ultrafiltration Crossflow Membrane Elements in “Full-Fit”, Net-Wrapped Configuration for Use in Dairy, BioPharm, Beverage and Other Applications.

Hydranautics' extensive experience in membrane innovation, design and manufacturing is at the core of every DairyUF™ 10K membrane element. DairyUF™ 10K elements deliver exceptional performance and value, being manufactured with highly controlled, ISO 9001-compliant processes which ensure the highest quality, as well as most consistent and reliable performance available. Hydranautics PES membranes are always constructed with polypropylene-backing substrate for maximum chemical-resistance and longevity in service.

Hydranautics has set a new industry-standard for the rolling of full-fit membrane modules: Hand-rolling of elements has been eliminated by the use of proprietary, robot-based automatic rolling machines, specifically designed by Hydranautics for fabricating membrane modules of the highest quality. The result is a higher level of filtration and separations performance for our customers.

Applications:

- Sweet/acid whey concentration before evaporation and spray-drying
- Enzyme and protein concentrations
- Pre-concentrating milk or whey for reducing product transport costs



Key Features:

- All elements are automatically rolled on a proprietary robotized machine
- Elements meet FDA regulations CFR Title 21 and 3A Sanitary Standards for Crossflow Membrane Modules, Number 45-01, Section C
- USDA-accepted – sizes 3838, 3840, 4336, 6338 8038 and 8040
- 100% testing of membrane rolls with 500 ppm Na₂SO₄ for flux and rejection compliance
- 100% vacuum-hold testing for element construction integrity

Benefits from Auto Rolling:

- Superior glue-line adhesion and strength
- Tighter rolling and caging
- Greater flow rates due to maximum effective membrane area
- Greater structural reliability



Type:

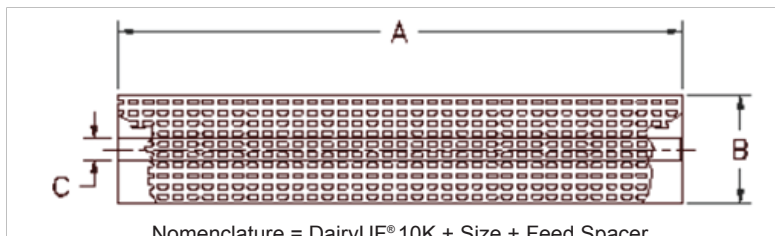
Applications Data:

Configuration Sanitary (Full-Fit) Spiral Wound
Membrane Polymer Polyethersulfone on Polypropylene Backing

Maximum Applied Pressure, psig (bar) 150 (10)
Maximum Chlorine Concentration, PPM at pH>10 200
Maximum Operating Temperature, °F (°C) 131°F (55°C)
Operating pH Range 2.0 - 10.0
Cleaning pH Range 2.0 - 13.0
Maximum Pressure Drop for a Vessel, psi 60 element (4 bar)

Product and Guidelines:

Model	Feed Spacer inches (cm)	Area ft ² (m ²)	Dimensions, inches (cm)			Max. Feed Flow, GPM (m ³ /hr)	Max. Pressure Drop per Element, psi (bar)
			A	B	C		
DairyUF 10K 3838-30	0.030 (0.076)	80 (7.4)	38.0 (96.5)	3.78 (9.6)	0.83 (2.11)	30 (6.8)	15 (1.0)
DairyUF 10K 3838-46	0.046 (0.117)	60 (5.6)	38.0 (96.5)	3.78 (9.6)	0.83 (2.11)	30 (6.8)	15 (1.0)
DairyUF 10K 4336-30	0.030 (0.076)	90 (8.4)	35.5 (90.2)	4.28 (10.9)	0.83 (2.11)	35 (7.9)	15 (1.0)
DairyUF 10K 4336-46	0.046 (0.117)	70 (6.5)	35.5 (90.2)	4.28 (10.9)	0.83 (2.11)	35 (7.9)	15 (1.0)
DairyUF 10K 4336-65	0.065 (0.165)	55 (5.1)	35.5 (90.2)	4.28 (10.9)	0.83 (2.11)	35 (7.9)	15 (1.0)
DairyUF 10K 4338-30	0.030 (0.076)	95 (8.8)	38.0 (96.5)	4.28 (10.9)	0.83 (2.11)	35 (7.9)	15 (1.0)
DairyUF 10K 4338-46	0.046 (0.117)	75 (6.9)	38.0 (96.5)	4.28 (10.9)	0.83 (2.11)	35 (7.9)	15 (1.0)
DairyUF 10K 6338-30	0.030 (0.076)	200 (19)	38.0 (96.5)	6.28 (16.0)	1.138 (2.89)	70 (15.8)	15 (1.0)
DairyUF 10K 6338-46	0.046 (0.117)	150 (14)	38.0 (96.5)	6.28 (16.0)	1.138 (2.89)	70 (15.8)	15 (1.0)
DairyUF 10K 6338-65	0.065 (0.1165)	120 (11)	38.0 (96.5)	6.28 (16.0)	1.138 (2.89)	70 (15.8)	15 (1.0)
DairyUF 10K 6338-80	0.090 (0.203)	100 (9.3)	38.0 (96.5)	6.28 (16.0)	1.138 (2.89)	70 (15.8)	15 (1.0)
DairyUF 10K 8038-30	0.030 (0.076)	360 (33)	38.0 (96.5)	7.90 (20.1)	1.125 (2.86)	80 (18.2)	13 (0.9)
DairyUF 10K 8038-46	0.046 (0.117)	280 (26)	38.0 (96.5)	7.90 (20.1)	1.125 (2.86)	80 (18.2)	13 (0.9)
DairyUF 10K 8038-65	0.065 (0.165)	215(20)	38.0 (96.5)	7.90 (20.1)	1.125 (2.86)	80 (18.2)	13 (0.9)
DairyUF 10K 8040-30	0.030 (0.076)	360 (33)	40.0 (102)	7.90 (20.1)	1.125 (2.86)	80 (18.2)	13 (0.9)



Solutions You Need. Technologies you Trust!

Hydranautics Corporate Office:

401 Jones Road, Oceanside, CA 92058, USA . Toll Free: 1-800-CPA-PURE Phone: +760-901-2500 Fax: +760-901-2578
 Email: info@hydranautics.com Website: www.membranes.com

Americas
Hydranautics

Europe/Africa
Hydranautics

Middle East
Hydranautics

Indian Subcontinent
Hydranautics

S.E. Asia/Australia
Nitto

Japan
Hydranautics /
Nitto

401 Jones Road
Oceanside, CA
92058, USA
Tel: +760 -901 -2500
Tel:1 -800-CPA-PURE
Fax: +760-901- 2578

Wilhelmina Singel
116, NL 6221 BL
Maastricht,
The Netherlands
Tel: +31 -(0) 43 -350 -3470
Fax: +31 -(0) 43 -350 -3489

Office no 31
Bldg no . S10122 (A2)
South Zone,
Jebel Ali Free Zone
P.O.Box: 112839 Dubai
United Arab Emirates
Tel: +971 4 889 5806

407, Palm Springs
Center, Link Road,
Malad (West),
Mumbai 400 064,
India
Tel:+91 -22 -40030500
Fax:+91 -22 -40030496

438 Alexandra Road
#19 -01/04,
Alexandra Point
Singapore 119958
Tel: +65 -6879 -3820
Fax: +65 -6223 -7690

East Tower, Gatecity
Osaki, 1 -11 -2 Osaki
Shinagawa, Tokyo
Japan, 1410032
Tel: +81 -3-57402166
Fax: +81 -3-57402265