

DairyNF™ Series

Highly selective nanofiltration composite sanitary membranes designed specifically for separation of divalent anions and / or organic molecules greater than 200 Daltons from monovalent salts and lower molecular weight organics. Applications include: whey and milk concentration, de-salting (mineralizing) of whey and other streams, DP1 / DP2 sugar fractionation, and BOD / COD reduction applications where low pressure operation and high salt passage is desired.

All DairyNF™ products are USDA accepted. Components conform to FDA regulation CFR Title 21, “3A Sanitary Standards for Crossflow Membrane Modules, Number 45-02”, EC Reg. No. 1935/2004, and EU Reg. No. 10/2011.

General Product Description

Configuration: Sanitary (Full-Fit)
 Outerwrap: Polypropylene net wrap
 Membrane Polymer: Composite Polyamide
 Molecular Weight Cut-off: 150 – 250 daltons

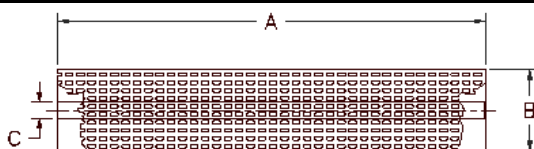
Model	Feed Spacer, inches (cm)	Area, ft ² (m ²)	Dimensions, inches (cm)			Max. Feed Flow, GPM (m ³ /hr)	Max. Pressure Drop per Element, psi (MPa)
			A	B	C		
DairyNF 3838-30	0.030 (0.076)	80 (7.4)	38.0 (96.5)	3.78 (9.60)	0.83 (2.11)	30 (6.8)	15 (0.10)
DairyNF 3838-46	0.046 (0.117)	63 (5.9)	38.0 (96.5)	3.78 (9.60)	0.83 (2.11)	30 (6.8)	15 (0.10)
DairyNF 3840-30	0.030 (0.076)	80 (7.4)	38.75 (98.4)	3.78 (9.60)	0.83 (2.11)	30 (6.8)	15 (0.10)
DairyNF 3840-46	0.046 (0.117)	63 (5.9)	38.75 (98.4)	3.78 (9.60)	0.83 (2.11)	30 (6.8)	15 (0.10)
DairyNF 8038-30	0.030 (0.076)	385 (36)	38.0 (96.5)	7.90 (20.1)	1.125 (2.86)	80 (18.2)	13 (0.09)
DairyNF 8038-46	0.046 (0.117)	300 (28)	38.0 (96.5)	7.90 (20.1)	1.125 (2.86)	80 (18.2)	13 (0.09)
DairyNF 8040-30	0.030 (0.076)	385 (36)	40.0 (101.6)	7.90 (20.1)	1.125 (2.86)	80 (18.2)	13 (0.09)
DairyNF 8040-46	0.046 (0.117)	300 (28)	40.0 (101.6)	7.90 (20.1)	1.125 (2.86)	80 (18.2)	13 (0.09)

Product Use and Restrictions[^]

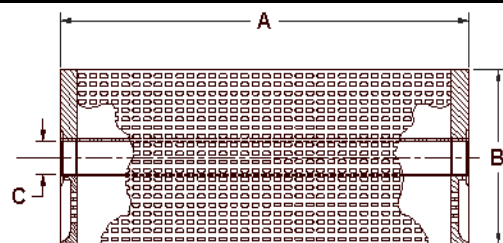
Maximum Applied Pressure: 600 psig (4.1 MPa)
 Maximum Chlorine Concentration: < 0.1 ppm
 Maximum Operating Temperature: 122°F (50°C)
 Operating pH Range: 3.0 – 9.0[^]
 Cleaning pH Range (ambient temperature): 1.8 – 11.0
 Cleaning pH Range (max temp 122°F/50°C): 1.8 – 10.5
 Maximum Pressure Drop for a vessel: 60 psi (0.41 MPa)

[^] The limitations shown are for general use. Operating at more conservative values may ensure the best performance and longest life of the membrane. See Hydranautics Technical Bulletin 207 for more detail on operation limits, cleaning pH, and cleaning temperatures.

To properly condition the membrane, a RO water flush and caustic clean in place must be performed prior to first use of new elements. Refer to TSB 218



3838, 3840, 8038 Style



8040 Style with ATDs

Note: Elements are dry, sealed in a polyethylene bag, and then packaged in a reinforced cardboard box. 8040 styles include interconnector assembly, ATDs and brine seals. Hydranautics believes the information and data contained herein to be accurate and useful. The information and data are offered in good faith, but without guarantee, as conditions and methods of use of our products are beyond our control. Hydranautics assumes no liability for results obtained or damages incurred through the application of the presented information and data. It is the user's responsibility to determine the appropriateness of Hydranautics' products for the user's specific end uses. 1/15/19

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