

**Nanofiltration**

**Sanitary NF Elements**

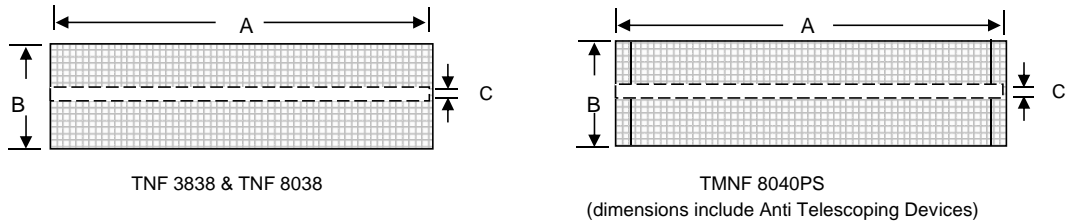
Model	Application	Description	Feed Spacer Thickness in. (mm)	Nominal Membrane Area ft <sup>2</sup> (m <sup>2</sup> )	Dimensions, in. (mm)			Max Pressure Drop per Element psi (bar)
					Length A	Element OD B	Perm Tube ID C	
TNF 3838N1	Product Concentration / Preconcentration	USDA Accepted 3A / FDA Compliant	0.031 (0.79)	75 (7)	38 (965)	3.8 (97)	0.83 (21)	15 (1.0)
TNF 3838N2			0.046 (1.17)	63 (5.9)	38 (965)	3.8 (97)	0.83 (21)	15 (1.0)
TNF 3840N1			0.031 (0.79)	75 (7)	38.75 (984)	3.8 (97)	0.83 (21)	15 (1.0)
TNF 8038N1			0.031 (0.79)	375 (34.8)	38 (965)	7.9 (201)	1.125 (28.6)	15 (1.0)
TNF 8038N2			0.046 (1.17)	310 (28.8)	38 (965)	7.9 (201)	1.125 (28.6)	15 (1.0)
TMNF 8040PSN1		FDA Compliant	0.031 (0.79)	375 (34.8)	40 (1016)	7.9 (201)	1.125 (28.6)	15 (1.0)
TMNF 8040PSN2			0.046 (1.17)	310 (28.8)	40 (1016)	7.9 (201)	1.125 (28.6)	15 (1.0)

Product Type: Net-wrapped (no tail), Spiral Wound Element with Proprietary Piperazine Amide Composite Membrane  
Selected specifically for maximum retention of sugars & proteins with high passage of monovalent salt ions

Materials Specifications:	Feed Spacers and Element Outer-Wrap:	Polypropylene
	Permeate Tubes (plus ATDs & ICs for TMNF 8040PS models):	Polysulfone
	Permeate Carrier:	Proprietary
	Adhesives:	Proprietary

Operating Limits:	Maximum Operating Pressure, psi (bar):	800 (55.2)
	Maximum Operating Temperature, °F (°C):	122 (50)
	Maximum Cleaning Temperature, °F (°C):	122 (50)
	Acceptable pH Range (operating) :	3.5-10.5
	Acceptable pH Range (short-term cleaning) :	1.8-11.5
	Maximum Pressure Drop per Vessel, psi (bar):	60 (4.0)
	(Consult Toray for pressure limits when operating above ambient temperature)	
Maximum Oxidant Tolerance:	Free Chlorine	Not Detectable
	H <sub>2</sub> O <sub>2</sub> continuous (ppm)	20
	H <sub>2</sub> O <sub>2</sub> short-term cleaning (ppm) < 77 °F (25°C)	1000

Dimensions:



Notice:

1. Elements are preserved in sodium meta-bisulfite. Appropriate personal protective equipment should be worn when handling.
2. Toray accepts no responsibility for results obtained by the application of this information or the safety or suitability of Toray's products, either alone or in combination with other products. Users are advised to make their own tests to determine the safety and suitability of each product combination for their own purposes.
3. All data may change without prior notice, due to technical modifications or production changes.
4. Consult Toray for other available sizes.
5. It is not recommended to use any acid cleaning formulations that contain nitric acid.