

**Reverse Osmosis**

**Sanitary TRO & TMRO Elements**

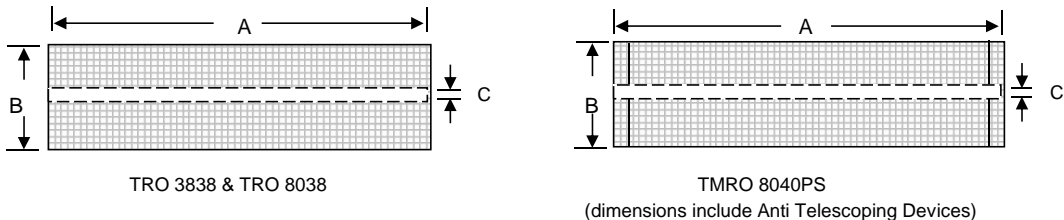
Model	Application	Description	Feed Spacer Thickness in. (mm)	Nominal Membrane Area ft <sup>2</sup> (m <sup>2</sup> )	Dimensions, in. (mm)			Max Pressure Drop per Element psi (bar)
					Length A	Element OD B	Perm Tube ID C	
TRO 3838N1	Product Concentration / Preconcentration	USDA Accepted 3A / FDA Compliant	0.031 (0.79)	77 (7.1)	38 (965)	3.8 (97)	0.83 (21)	15 (1.0)
TRO 3838N2			0.046 (1.17)	60 (5.6)	38 (965)	3.8 (97)	0.83 (21)	15 (1.0)
TRO 3839N1			0.031 (0.79)	77 (7.1)	38.75 (984)	3.8 (97)	0.83 (21)	15 (1.0)
TRO 7838N1			0.031 (0.79)	380 (35.3)	38 (965)	7.73 (196)	1.125 (28.6)	15 (1.0)
TRO 7838N2			0.046 (1.17)	310 (28.8)	38 (965)	7.73 (196)	1.125 (28.6)	15 (1.0)
TRO 8038N1			0.031 (0.79)	390 (36)	38 (965)	7.9 (201)	1.125 (28.6)	15 (1.0)
TRO 8038N2			0.046 (1.17)	320 (29.7)	38 (965)	7.9 (201)	1.125 (28.6)	15 (1.0)
TMRO 8040PS			Dairy RO Polisher	FDA Compliant	0.046 (1.17)	390 (36)	40 (1016)	7.9 (201)

**Product Type:** Net-wrapped (no tail), Spiral Wound Element with Cross-Linked Fully Aromatic Polyamide Composite Membrane  
Selected specifically for maximum retention of valuable milk solids and COD / BOD contributing compounds

<b>Materials Specifications:</b>	<b>Feed Spacers and Element Outer-Wrap:</b>	Polypropylene
	<b>All Permeate Tubes (plus ATDs &amp; ICs for TMRO 8040PS):</b>	Polysulfone
	<b>Permeate Carrier:</b>	Proprietary
	<b>Adhesives:</b>	Proprietary

<b>Operating Limits:</b>	<b>Maximum Operating Pressure, psi (bar):</b>	800 (55.2)
	<b>Maximum Operating Temperature, °F (°C):</b>	122 (50)
	<b>Maximum Cleaning Temperature, °F (°C):</b>	122 (50)
	<b>Acceptable pH Range (operating) :</b>	2.5-10.5
	<b>Acceptable pH Range (short-term cleaning) :</b>	1.7-11.5
	<b>Maximum Pressure Drop per Vessel, psi (bar):</b>	60 (4.0)
	<b>(Consult Toray for pressure limits when operating above ambient temperature)</b>	
<b>Maximum Oxidant Tolerance:</b>		
	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.