

NANOFILTRATION-90  
4.0 INCH THIN FILM COMPOSITE MEMBRANE  
SPECIFICATIONS

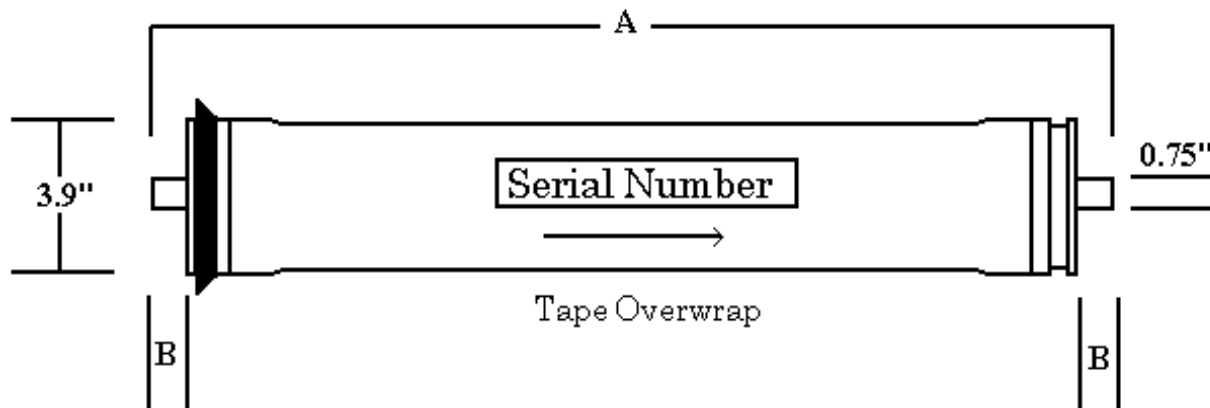
Membrane Designed to fit a 4.0 Inch ID Housing or Pressure Vessel

ALL MATERIALS ARE NSF AND/OR FDA APPROVED WITH THE EXCEPTION OF THE ADHESIVE ON THE OUTER WRAP AND THE FIBERGLASS OUTER WRAP.

**Application:** HCTI NF90 elements with 90% monovalent ion rejection and more than 99% rejection of divalent ions are useful for water softening, removing endocrine disruption chemicals from drinking water and also food processing in small size systems.

Model Number	Dimension	Dimension	Flow (GPD)	Rejection (%) (Monovalent Ion)		Rejection % Divalent
	A (Inches)	B (Inches)	Nominal	Min.	Nominal	(MgSO <sub>4</sub> ) <sup>2</sup>
MEM 4014 NF-90	14	1.1	700	85.0	95.0	99.5%
MEM 4021 NF-90	21	1.1	1000	85.0	95.0	99.5%
MEM 4040 NF-90	40	1.1	1900	85.0	95.0	99.5%

- The stated performance is initial data taken after 30 minutes of operation based on the following monovalent test conditions; 2,000 mg/L NaCl solution at 75 psig (0.5 MPa) applied pressure, 15% recovery, 77°F (25°C) and pH 6.5-7.0.
- The stated performance is initial data taken after 30 minutes of operation based on the following divalent test conditions; 2000 mg/L MgSO<sub>4</sub> solution at 75 psig (0.5 MPa) applied pressure, 15% recovery, 77°F (25°C) and pH 6.5-7.0.
- All elements are vacuum sealed in a polyethylene bag containing 1.0% sodium bi-sulfite solution.



**Operating Limits**

Membrane Type	Thin-Film Composite
Maximum Operating Pressure	300psi (2.12 MPa)
Maximum feed flow rate	18 gpm (4.09 m <sup>3</sup> /h)
Minimum concentrate flow rate	4.0 gpm (0.91 m <sup>3</sup> /h)
pH Range, Continuous	3 to 10
pH Range, Cleaning Cycle (30 min)	2 to 11
Maximum Operating Temperature	113° f (45° C)
Maximum Feed Turbidity	1 NTU
Maximum Feed Silt Density Index (15')	5.0
Free chlorine Tolerance	<0.1 mg/L