

## Filter Data Sheet

### G.E.M. Reverse Osmosis Membrane

**G.E.M. Reverse Osmosis Membranes** provide the high salt rejection and flow rates typically available from competitive composite membranes while providing superior value. This gives the membrane user an edge by providing reduced reverse osmosis system operating costs. The pre-filtration program offered by Global Filter, in conjunction with the G.E.M. elements, can minimize the need for costly membrane cleanings. These elements are manufactured utilizing an ISO 9001:2000 Certified Quality Management System.

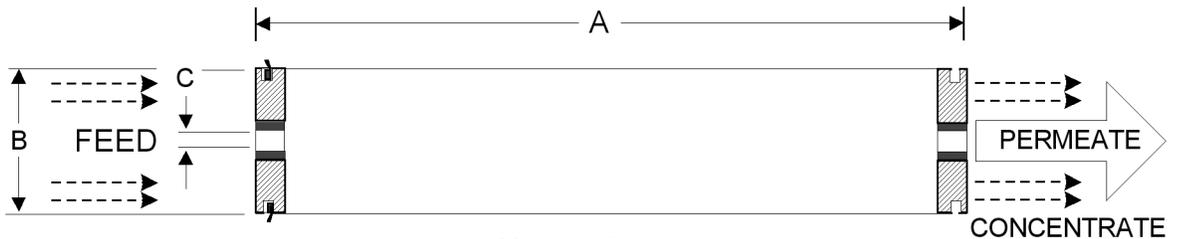
#### Application Data\*

**Max. Applied Pressure**.....600 PSIG (4.16 MPa)  
**Max. Chlorine Concentration** ..... <0.1 PPM  
**Max. Operating Temperature**..... 113°F (45°C)  
**Feedwater pH Range** ..... 3.0 - 10.0  
**Max. Feedwater Turbidity** ..... 1.0 NTU  
**Max. Feedwater SDI (15 mins)** ..... 5.0  
**Max. Feed Flow** .....75 GPM (17.0 m3/h)  
**Max. Ratio of Concentrate to Permeate Flow** ..... 5:1  
**Max. Pressure Drop for Each Element**..... 10 PSI

\* The limitations shown here are for general use. The values may be more conservative for specific projects to ensure the best performance and longest life of the membrane.

#### Dimensions

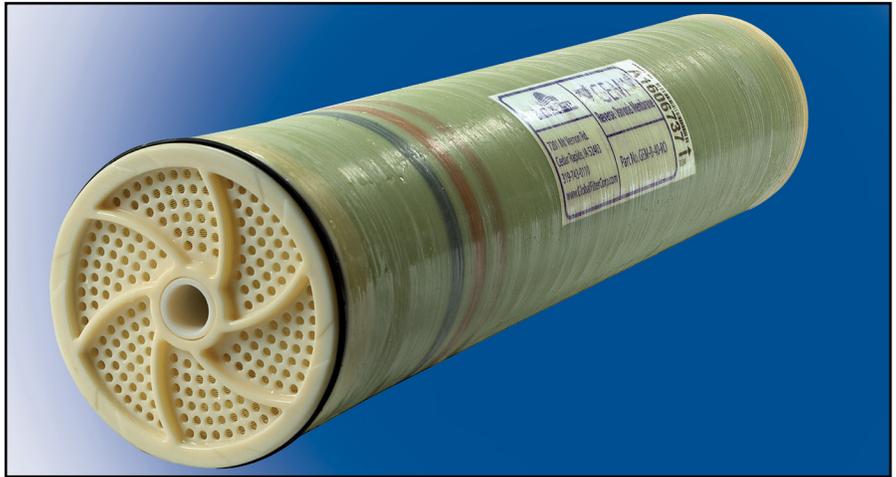
A	40.0" (1016 mm)
B	7.95" (201.9 mm)
C	1.125" (28.6 mm)



\* Weight = 36 lbs (16.4kg)

#### Ordering Information

GEM	-	Diameter (Nominal)	-	Length	-	RO
		8		40"		



#### Typical Applications

- Producing boiler make-up
- Water for power plants
- Blow-down from power plants
- Desalting of well water for municipal drinking water supplies
- Reducing TDS prior to ion-exchange
- Purifying water to ultrapure standards for semiconductor and microelectronics manufacturing facilities

#### Performance

**Permeate Flow**.....8,900 to 14,000 GPD  
**Salt Rejection Minimum** .....98%

#### Testing Conditions

The stated performance is initial (data taken after 30 minutes of operation), based on the following conditions:

**NaCl Test Solution**..... 1500 PPM  
**Applied Pressure** .....225 PSI (1.55 MPa)  
**Operating Temperature** ..... 77°F (25°C)  
**Permeate Recovery** ..... 15%  
**pH Range**.....6.5 - 7.0

#### Type

**Configuration**.....Spiral Wound  
**Membrane Polymer** .....Composite Polyamide

DISCLAIMER: Filtration data presented is representative of performance observed in controlled laboratory testing. It is not given as a warranty, specification or statement of fitness for use. Specific performance can vary widely depending on contaminant type, fluid properties, flow rates and environmental conditions. It is recommended that users conduct thorough qualification testing to assure the product functions as required.