

## Filter Data Sheet



### G.E.M. REVERSE OSMOSIS MEMBRANE GLOBAL ECONOMY MEMBRANE

G.E.M. Reverse Osmosis Membranes provide the high salt rejection and flow rates typically available on composite membranes while providing superior value. This gives the membrane user an edge by providing reduced costs for the operation of reverse osmosis system. The pre-filtration program offered in conjunction with the G.E.M. membrane may eliminate the need for costly membrane cleanings. The membranes are manufactured utilizing ISO 9001:2000 Certified Quality Management System.

### Application

Typical applications for G.E.M. membranes include:

- Producing Boiler Make-Up
- Water for Power Plants
- G.E.M. elements have also been used to treat blow-down from Power Plants
- Desalting of Well Waters for Municipal Drinking Water Supplies
- Reducing TDS prior to Ion-Exchange
- Purifying Water to Ultrapure Standards for Semiconductor Manufacturing Facilities

### Performance

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

### Type

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



### Application Data\*

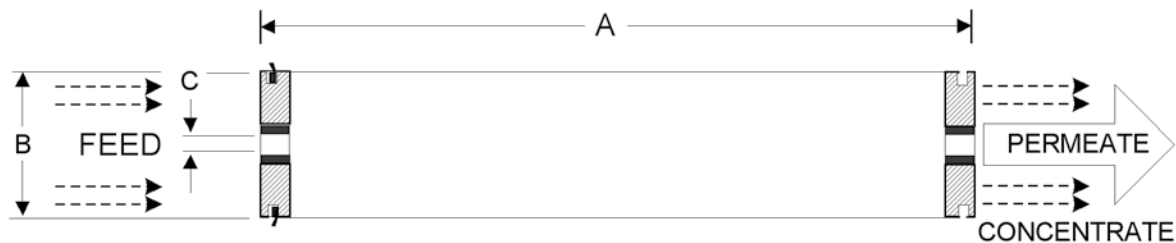
**Max. Applied Pressure**.....600 psig (4.16 MPa)  
**Max. Chlorine Concentration**.....< 0.1 PPM  
**Max. Operating Temperature**.....113° F (45° C)  
**Feedwater pH Range**.....3.0 - 10.0  
**Max. Feedwater Turbidity**.....1.0 NTU  
**Max. Feedwater SDI (15 mins)**.....5.0  
**Max. Feed Flow**.....75 GPM (17.0 m<sup>3</sup>/h)  
**Max. Ratio of Concentrate to Permeate Flow for any Element**.....5:1  
**Max. Pressure Drop for Each Element**.....10 psi

### Test 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

\* 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.



A, inches (mm)	B, inches (mm)	C, inches (mm)	Weight, lb s. (kg)
40.0 (1016)	7.95 (201.9)	1.125 (28.6)	36 (16.4)