## GE Water & Process Technologies

# **SWRO HR Series**

## **Seawater RO High Rejection Elements**

The SWRO HR series family of proprietary thin film reverse osmosis membrane elements are characterized by excellent sodium chloride rejection. SWRO HR high rejection seawater elements are selected when extremely high quality permeate is demanded from seawater that is relatively high in TDS.

These elements provide excellent rejection characteristics when operated at pressures exceeding 800psig (5,516kPa) and elevated seawater temperature conditions.

#### **Table 1: Element Specification**

Membrane	Thin-film membrane (TFM*)		
Model	Flow average gpd (m3/day)	Salt rejection average	Salt rejection minimum
SWRO-370-HR-WT	6,000 (22.7)	(NaCl) <sup>1,2</sup> 99.75%	(NaCl) <sup>1,2</sup> 99.3%
SWRO-400-HR-WT	6,500 (23.6	99.75%	99.3 %

 $^{\rm 1}$  Average salt rejection after 24 hours operation. Individual flow rate may vary +25%/-15%.

 $^2$  Testing conditions: 32,000ppm NaCl solution at 800psig (5,516kPa) operating pressure, 77°F, pH7.5 and 7% recovery.

Model	Active Area ft² (m²)	Outer wrap	Part Number
SWRO-370-HR-WT	370 (34.4)	Fiberglass	3021564
SWRO-400-HR-WT	400 (37.2)	Fiberglass	3021565

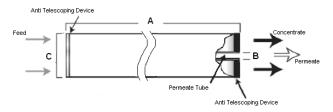


Figure 1: Element Dimensions Diagram

#### **Table 2: Dimensions and Weight**

	Dimensions, inches (cm)			Boxed
Model <sup>1</sup>	Α	B <sup>2</sup>	с	Weight Ibs (kg)
SWRO HR	40.0 (101.6)	1.125 (2.86)	7.9 (20.1)	35 (16)

<sup>1</sup>This product ships wet.

<sup>2</sup>Internal diameter unless specified OD (outside diameter).

### Table 3: Operating and CIP parameters

Typical Operating Pressure	800 psig (5,516 kPa)
Typical Operating Flux	7-11GFD (12-19LMH)
Maximum Pressure	1,200 psig (8,274 kPa)
Maximum Temperature	Operating: 122°F (50°C) Cleaning: 122°F (50°C)
Recommended pH	Optimum rejection pH: 7.0-7.5, Operating Range pH: 4.0-11.0, Cleaning Range pH: 2.0-11.5
Recommended Pressure Drop	Over an element: 12 psig (83 kPa) Per housing: 50 psig (345 kPa)
Chlorine Tolerance	1,000+ ppm-hours, dechlorination recommended
Feedwater	NTU < 1 SDI < 5



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