# UE8040-ES10 PES UF element for fractionation process



• MWCO 10,000 Da







### SPECIFICATIONS •

#### **General Features**

Permeate Flow Rate 8,000 GPD (30.3 m<sup>3</sup>/day)

Molecualar Weight Cut Off 10,000 (Daltons)

Effective Membrane Area 400 ft<sup>2</sup> (37.2 m<sup>2</sup>)

Membrane Type Thin-Film Composite

Membrane Material Polyethersulfone (PES)

Element Configuration Spiral-Wound, FRP Wrapping

**Test Conditions:** pure water at 20 psig (0.14 MPa) applied pressure;  $77^{\circ}F(25^{\circ}C)$ ; pH 6.5–7.0; Permeate flow rate for each element may vary +25 / -25%.

### **Dimensions and Weight**

Model Name	Α	В	С	Weight	Part Number	
					Inter-Connector	Brine Seal
UE8040-ES10	40.0 inch (1,016 mm)	7.9 inch (200 mm)	1.125 inch (28.6 mm)	15kg	SWA01049	SWA01043



- 1. Each membrane element supplied with one interconnector (coupler) and four O-rings.
- 2. All UE8040 elements fit nominal 8.0 inch (203.2 mm) I.D. pressure vessels.

## **UE8040-ES10**



**PES UF element for fractionation process** 

### **APPLICATION DATA** •

### **Operating Limits**

Max. Pressure Drop / Element	15 psi (0.10 MPa)		
Max. Pressure Drop / 240" Vessel	60 psi (0.41 MPa)		
Max. Operating Pressure	600 psi (4.14 MPa)		
Max. Feed Flow Rate	75 gpm (17.0 m³/hr)		
Min. Concentrate Flow Rate	16 gpm (3.6 m³/hr)		
Max. Operating Temperature	113°F (45°C)		
Operating pH Range	2.0 – 11.0		
CIP pH Range	1.0 – 13.0		
Max. Turbidity	1.0 NTU		
Max. SDI (15 min)	5.0		

### **GENERAL HANDLING PROCEDURES** •

- Elements contained in the boxes must be kept dry at room temperature (7–32°C; 40–95°F) and should not be stored in direct sunlight.
- For WET-TYPE, the preservative solution (1% sodium metabisulfite solution) is added to prohibit the growth of micro-organisms.
- Permeate from the first hour of operation should be discarded.
- Salt rejection would be stabilized within 48 hours of continuous operation depending on feedwater and operating conditions, but may take over a week for dry elements.

- Keep elements moist at all times after initial wetting.
- Avoid excessive pressure and flow spikes.
- Only use chemicals compatible with the membrane elements and components. Use of such chemicals may void the element limited warranty.
- Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure voids the element limited warranty.
- The element shell is FRP(Fiber Reinforced Plastic). Be aware of glass fiber strands and use safety equipment.