RE 4021-BLF





AGUA CONTROL LLC 5609 E ADAMO DRIVE STE.D TAMPA FL, 33619 (813) 621-7774 (813) 621-7776

Ultra-low pressure RO element for low TDS water

SPECIFICATIONS

General Features Permeate flow rate: 1,050 GPD (4.0 m³/day)

Stabilized salt rejection: 99.2% Effective membrane area: 35 ft² (3.3 m²)

1. The stated product performance is based on data taken after 30 minutes of operationat the following test conditions:

• 500 mg/L NaCl solution at 100 psig (0.7 MPa) applied pressure

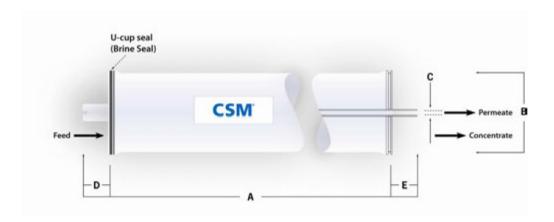
- 8% recovery
- 77 °F (25 °C)
- pH 6.5 -7.0
- 2. Minimum salt rejection is 99.0%.
- 3. Permeate flow rate for each element may vary but will be no more than 15%
- 4. All elements are vacuum sealed in a polyethylene bag containing 1.0% SBS (sodium bisulfite) solution and individuallypackaged in a cardboard box.

Membrane type: Thin-Film Composite
Membrane material: Polyamide(PA)

Element configuration: Spiral-Wound, FRPWrapping

Dimensions

					E	Part Number	
Model Name	Α	В	С	D		Inter - connector	Brine Seal
RE40 21-BLF	21.0 inch (534 mm)	4.0 inch (102 mm)	0.75 inch (19.1 mm)	1.05 inch (26.7 mm)	1.05 inch (26.7 mm)	40000305	40000306



- 1. Each membrane element upplied with one brine seal, one interconnector (coupler) and four o-rings.
- 2. All RE4021 elementsfit nominal4.0 inch (102 mm) I.D. pressure vessels.

The information provided in this document is solely for informative purposes It is the user's responsibility to ensure the appropriate usage of this productWoongjin Chemical assumes no obligation, liability or damages incurred for the misuse of the product or for the information provided in this documentThis document does not express or implies any warranty as to the merchantability or fitness of the product.

RE40 21-BLF





APPLICATION DATA

 Max. Pressure Drop / Element 	15 psi (0.1 MPa)		
·	60 psi (0.41 Mpa)		
·	600 psi (4.14 MPa)		
· Max. Feed Flow Rate	13 gpm (2.95 m ³ /hr)		
Min. Concentrate Flow Rate	3 gpm (0.68 m ³ /hr)		
 Max. O peratingTemperature 	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		
· Max. Chlorine Concentration	< 0.1 mg/L		
Waste water Conventional (SDI < 5)	8–12 gfd		
• Waste water Pretreated by UF/MF (SDI < 3)	10–14 gfd		
 Seawater, Open Intake (SDI < 5) 	7–10 gfd		
 Seawater, Beach Well (SDI < 3) 	8–12 gfd		
SurfaceW ater (SDI < 5)	12–16 gfd		
SurfaceW ater (SDI < 3)	13-17 gfd		
· Well water (SDI < 3)	13-17 gfd		
· RO permeate (SDI < 1)	21-30 gfd		
· Langlier Saturation Index(LSI)	<+1.5		
 Stiff and Davis Saturation Index(SDSI) 	<+0.5		
· CaSO ₄	230% saturation		
· SrSO ₄	800% saturation		
· BaSO ₄	6,000% saturation		
· SiO ₂	100% saturation		
[†] The above saturation limits are typically accepted by proprietary a manufacturers. It is the user's responsibility to ensure proper chem concentration are dosed ahead of the membrane system to prever formation anywhere within the membraneystem. Membrane elem or damaged due to scale formation are not covered by the limited			
	 Max. Pressure Drop / 240" Vessel Max. O peratingPressure Max. Feed Flow Rate Min. C oncentrate Flow Rate Max. O peratingTemperature Operating pH Range CIP pH Range Max. Turbidity Max. SDI (15 min) Max. C hlorine C oncentration Waste water Pretreated by UF/MF (SDI < 3) Seawater,O pen Intake (SDI < 5) Seawater,Beach Well (SDI < 3) SurfaceW ater (SDI < 3) SurfaceW ater (SDI < 3) Well water (SDI < 3) RO permeate (SDI < 1) Langlier Saturation Index(LSI) Stiff and Davis Saturation Index(SDSI) CaSO 4 SrSO 4 BaSO4 SiO 2 The above saturation limits are typically accepted I manufacturers. It is the user's responsibility to ensur concentration are dosed ahead of the membrane sy 		

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. If the polyethylene bag is damaged, a new preservative solution (sodium bisulfite) must be added and air-tight seald to prevent drying and biological growth.
- Permeate from the first hour of operation should be discarded to flush out the preservative solution.
- Elements should be immersed in a preservative solution during storage, shipping and system shutdowns to prevent biological growth and freezing. The standard storage solution contains 1% by weight sodium bisulfite or sodium metabisulfite (food grade). For short term storage (i.e. one week or less) 1% by weight sodium metabisulfite solution is adequate for preventing biological growth.
- 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.

