

VinoCon* RO7 Series

FACT SHEET

Wine processing – grape juice & must concentration

The VinoCon family of proprietary thin-film reverse osmosis membrane elements is characterized by high sodium chloride rejection. These A-Series elements are selected when small size organics (<150D) need to permeate through the membrane while retaining salts and larger organics.

The VinoCon RO7 Elements provide high flux rates at operating pressures up to 1,000 psi (6,895 kPa). This element is designed to tolerate periodic hot-water sanitation while still maintaining element integrity. They are typically used for concentrating grape must in wineries requiring stringent sanitary procedures. Other applications may include grape juice concentration and wine adjustment.

The VinoCon RO7 Elements feature a Durasan* Cage patented outer wrap, standard feed spacers and polysulfone parts.

Table 1: Element Specification

Membrane	Thin-film membrane (TFM*)		
Model	Spacer mil (mm)	Active area ft ² (m ²)	Part number
VinoCon RO7 4040C35	35 (0.89)	80 (7.4)	3161796
VinoCon RO7 4040C50	50 (1.27)	65 (6.0)	3161798
VinoCon RO7 8040C35	35 (0.89)	340 (31.6)	3161797
VinoCon RO7 8040C50	50 (1.27)	240 (22.3)	3161799

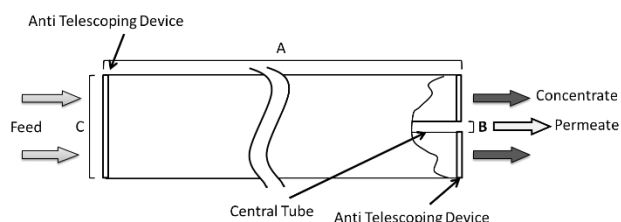


Figure 1: Element Dimensions Diagram – Female

Table 2: Operating and CIP Parameters

Typical Operating Pressure	200-800 psi (1,379 – 5,516 kPa)
Typical Operating Flux	5-20 GFD (8–34 LMH)
Clean Water Flux (CWF) (1)	16-18 GFD (27–31LMH) @ 425 psi
Maximum Operating Pressure (2)	1,000 psi (6,895 kPa)
Maximum Temperature	122°F (50°C)
pH Range	2.0-10.5
Maximum Pressure Drop	Over an element: 15 psi (103 kPa)
Chlorine Tolerance	1000 ppm-hours

(1) Clean water flux (CWF) is the rate of water permeability through the membrane after cleaning (CIP) at reproducible temperature and pressure. It is important to monitor CWF after each cleaning cycle to determine if the system is being cleaned effectively. CWF can vary ±25%.

(2) Operating pressure in bar multiplied by operating temperature in degree Celsius should not exceed 2000.

Table 3: Dimensions and Weights

Model	Type	Dimensions, inches (cm)			Boxed Weight lbs (kg)
		A	B	C	
VinoCon RO7 4040C	Female	40.0 (101.6)	0.625 (1.59)	3.98 (10.1)	9 (4)
VinoCon RO7 8040C	Female	40.0 (101.6)	1.125 (2.86)	7.91 (20.1)	35 (16)

Table 4: CIP limits for RO elements

Temperature	pH Minimum	pH Maximum
50°C (122°F)	2.0	11.5
45°C (113°F)	1.5	11.5
35°C (95°F)	1.5	11.5
25°C (77°F)	1.0	12.0