

## Chapter II—General Technical Specifications of VONTRON™ RO Membranes

### 2-1 VONTRON™ Residential and Non-standard RO Element

#### Brief Introduction

The residential and non-standard RO elements are mainly applicable to various small-sized systems, such as household water purifier and other water purifying devices in hospital and laboratory.

#### Specifications and Major Properties

Model	Active Membrane Area ft <sup>2</sup> (m <sup>2</sup> )	Average Permeated Flow GPD (m <sup>3</sup> /d)	Stable Rejection Rate (%)	Minimum Rejection Rate (%)
ULP1810-40	3.3 (0.31)	40 (0.15)	97.0	96.0
ULP1812-50	4.4 (0.41)	50 (0.19)	97.5	96.0
ULP1812-75	5.0 (0.46)	75 (0.28)	97.5	96.0
ULP2012-100	6.0 (0.56)	100 (0.38)	95.0	93.0
HOR2012	6.0 (0.56)	50 (0.19)	97.5	96.0
ULP2812	11.2 (1.04)	200 (0.76)	97	95.5
ULP3012	13.2 (1.23)	240 (0.91)	97	95.5
ULP3020	24.1 (2.24)	420 (1.60)	97	95.5

#### Testing Conditions:

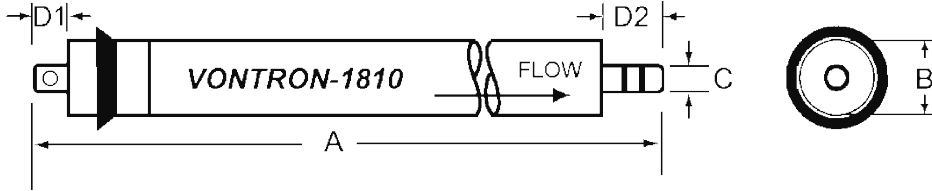
Testing Pressure.....	60 psi (ULP1810-40,ULP1812-50,ULP1812-75, ULP2012-100, HOR2012) 100 psi (ULP2812, ULP3012, ULP3020)
Testing Solution Temperature.....	25°C
Testing Solution Concentration(NaCl) .....	250 ppm (ULP1810-40,ULP1812-50,ULP1812-75,ULP2012-100, HOR2012) 500 ppm (ULP2812, ULP3012, ULP3020)
pH Value of Testing Solution .....	7.5
Recovery Rate of Single Element .....	15°C

#### Operation limits and conditions

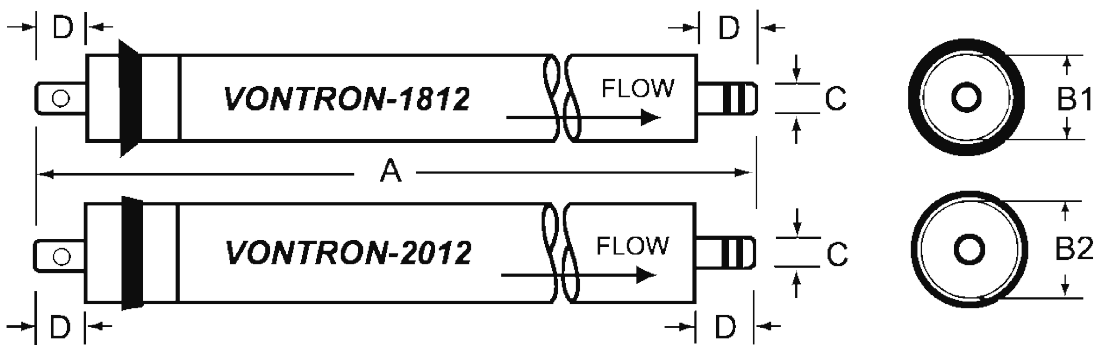
Max. Working Pressure.....	300psi(2.07Mpa)
Max. Feedwater Temperature.....	45°C
Max. Feedwater SDI.....	5
Residual chlorine Concentration of Feedwater.....	<0.1 ppm ..... <0.5 ppm (HOR2012)
pH Range of Feedwater during Continuous Operation.....	3~10
pH Range of Feedwater during Chemical Cleaning.....	2~12
Max. Pressure Drop of Single Membrane Element.....	10psi (0.07Mpa)

**Dimensions of Membrane Element**

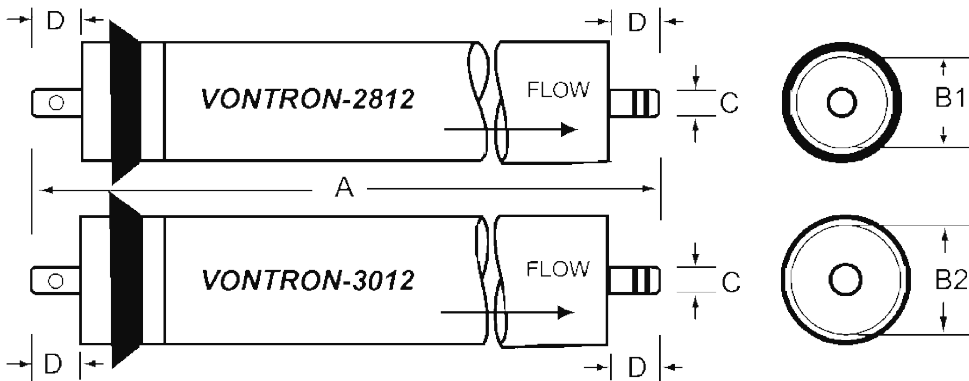
All dimensions are shown in: millimeter (inch)



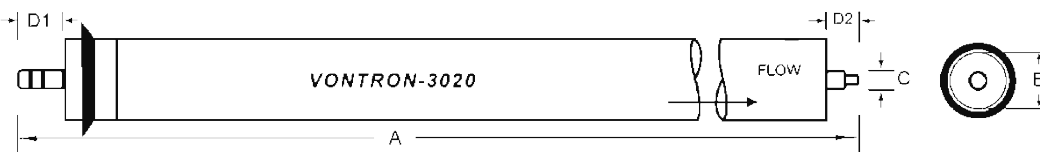
A=256.0mm (10.08") B=44.5mm (1.75")  
 C=17.0mm (0.67") D1=15.0mm(0.59") D2=25.0mm(0.98")



A=298.0 (11.7) C=17.0 (0.67)  
 B1=44.5 (1.75) B2=48.2 (1.9) D=21.0(0.83)



A=298.0mm (11.7") C=17.0mm (0.67")  
 B1=71.1mm (2.8") B2=76.2mm (3.0") D=21.0mm(0.83")



A=513.8mm (20.23") B=77 (3.0")  
 C=26.1mm (0.85") D1=26.5mm(1.04") D2=23.3mm(0.92")