

UNISOL AR Series Reverse Osmosis Membrane Modules

Acid-resistant rolled reverse osmosis membrane series

DescriptionThe AR Series RO membrane was developed for stable, high flux performance over
long periods of time in acidic environments for acid concentration of low pH feed
solutions. Typical solutions such as the concentration of H2SO4. AR Series RO
membrane elements utilize proprietary feed grids, production grids, adhesives and
fiberglass cladding construction for long-term operation in acidic conditions.

Specification	Membrane		RO4			
	Material Permeate Flow ^{(1) (2)} GPD (m ³ /d) Stabilized Salt Rejection ⁽¹⁾		TFC			
			AR RO4 2540M560 (2.1)AR RO4 4040M-M1,600 (6.1)AR RO4 8040M6,700 (25)		560 (2.1)	
					1,600 (6.1)	
					6,700 (25)	
			≥ 98%			
Limits	Max Operating Pressure:		60bar			
	Max Pressure Drop:		1bar			
	Max Operating Temperature:		50 °C			
	Cleaning pH Range:		0–12			
Area	Model number		Material num	ber <u>Mem</u> bra	Membrane area	
ft² (m²)	AR RO4 2540M		91112447	25 (2.3)		
	AR RO4 4040M-M		91112448	80 (7.5)		
	AR RO4 8040M		/ 370 (34.4)			
Dimensions	Male		Female			
		Α	→	A		
	B					
		D				
	Size mm (inch)	A ^[1]	Ø B ^[2]	ØC ^[3]	D	
	2540 Male	965 (38)	62 (2.4)	19 (0.748)	1016 (40)	
	4040 Male	965 (38)	99.4 (3.9)	19 (0.748)	1016 (40)	
	4040 Female	1016 (40)	99.4 (3.9)	16 (0.629)	/	
	8040 Female	1016 (40)	200.5 (7.9)	28.9 (1.138)	/	
	 [1] Tolerance: ±0.5mm. [2] Tolerance: -2/0mm 					

^[2] Tolerance: -2/0mm.

^[3] 2540/4040-M tolerance: 0~+0.1 mm. 4040-F tolerance: ±0.1mm.

8040 tolerance: -0.2~0 mm.

⁽¹⁾ Test condition: 32000ppm NaCl, 55bar, 25°C, pH 6.5-7.0.

 $^{(2)}$ Permeate flow for individual elements may vary ± 20%.

⁽³⁾ For the purpose of improvement, specifications may be updated periodically.