

UNISOL Seawater Reverse Osmosis Elements

Spiral Wound Element FG SWHR Series

Description SWHR series membrane, with the Thin Film Composite technology, allows elements offer a combination of high rejection and low energy requirements to reduce the total cost of desalination; suitable for medium to high salinity seawater applications

Specification	Membrane	SWHR		
	Material	Polyamide		
Permeate Flow ^{(1) (2)} GPD (m ³ /d)	Type	46mil (C)	28mil (J)	34mil (M)
	2514	/	150 (0.6)	/
	2521	/	275 (1.1)	/
	2540	/	560 (2.1)	/
	4040	/	1,600 (6.1)	1,600 (6.1)
	8040	8450 (32)	7,500 (28)	7,500 (28)
Stabilized Salt Rejection ⁽¹⁾	99.8%			
Minimum Salt Rejection ⁽¹⁾	99.6%			

Limits	Max Operating Pressure:	80 bar (1160psi)
	Max Pressure Drop:	1 bar (14.5 psi) for individual element
	Max Operating Temperature:	50 °C (122 °F)
	Cleaning pH Range:	3 – 10
	Chlorine Concentration	< 0,1 ppm

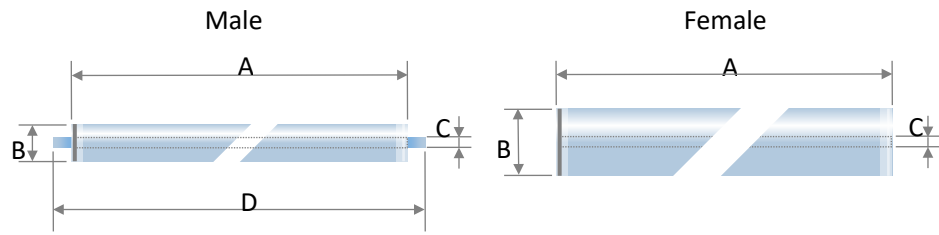
Area ft ² (m ²)	Model type	46mil (C)	28mil (J)	34mil (M)
	FG SWHR 2514	/	6.5 (0.6)	/
	FG SWHR 2521	/	12 (1.1)	/
	FG SWHR 2540	/	28 (2.6)	/
	FG SWHR 4040	/	85 (7.9)	80 (7.5)
	FG SWHR 8040	400 (37)	400 (37)	400 (37)

⁽¹⁾ Test condition: 32000ppm NaCl solution, 800psi (55bar), 77 °F (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

Dimensions



Size/mm (inch)	A ^[1]	∅B ^[2]	∅C ^[3]	D	Permeate Tube
2514*	295 (11.6)	61 (2.4)	19 (0.748)	356 (14)	Male
2521*	472 (18.6)	61 (2.4)	19 (0.748)	533 (21)	Male
2540*	955 (37.5)	61 (2.4)	19 (0.748)	1016 (40)	Male
4040*-M	963 (37.9)	99.4 (3.9)	19 (0.748)	1016 (40)	Male
4040*-F	1016 (40)	99.4 (3.9)	16 (0.629)	1016 (40)	Female
8040*	1016 (40)	200.5 (7.9)	28.9(1.138)	1016 (40)	Female

^[1] Tolerance: -2~0mm.

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

^[3] 2514/2521/2540/4040-M tolerance: 0~+0.1 mm. 4040-F tolerance: ±0.1mm.
8040 tolerance: -0.2~0 mm.