

QuantumFlux (Qfx)

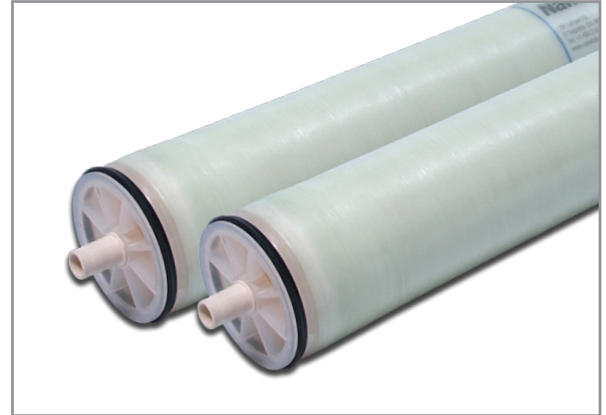
Seawater Reverse Osmosis (RO) Element

Qfx SW 75 ES

Overview

NanoH₂O's thin-film nanocomposite (TFN) **QuantumFlux** membranes lower the cost of desalination by improving energy efficiency and productivity. Qfx membranes feature benign nanomaterials incorporated into the thin-film polyamide layer of a composite membrane. This innovative patented and patent-pending technology significantly increases membrane permeability while matching best-in-class salt rejection.

- Higher flux with requisite salt rejection
- Standard 4-inch spiral wound element design
- Easy to retrofit into existing RO plants

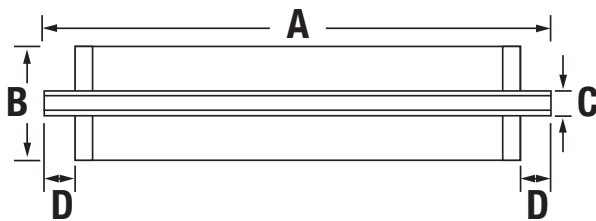


Product Specifications

Configuration: 4-inch spiral wound
 Membrane Polymer: Thin-film nanocomposite (TFN) polyamide

Product Number	Permeate flow rate m ³ /d (gpd)	Minimum NaCl Rejection %	Stabilized NaCl Rejection %	Active Membrane Area m ² (ft ²)	Feed Spacer mil	Stabilized Boron Rejection %
Qfx SW 75 ES	9.6 (2,530)	99.7	99.8	7.0 (75)	28	89

Note: The above values are normalized to the following conditions: 32,000 ppm NaCl, 5 ppm boron, 5.5 MPa (800 psi), 25°C (77°F), pH 8, 8% recovery. Permeate flows for individual elements may vary +/- 15%.



Part Number	Length A	Element O.D. B	Perm Tube I.D. C	Connector Length D
Qfx SW 75 ES	1016 mm (40 in.)	99 mm (3.9 in.)	19 mm (0.75 in.)	26.7 mm (1.05 in.)

Operating Specifications

For more information and operating guidelines, visit www.nanoh2o.com

Max. Applied Pressure:	8.27 MPa (1,200 psig)
Max. Chlorine Concentration:	< 0.1 ppm
Max. Operating Temperature:	45°C (113°F)
pH Range, Continuous (Cleaning):	2-11 (1-13)
Max. Feedwater Turbidity:	1.0 NTU
Max. Feedwater SDI (15 mins):	5.0
Max. Feed Flow:	4.3 m ³ /h (19 GPM)
Min. Ratio of Concentrate to Permeate Flow for any Element:	5:1
Max. Pressure Drop (ΔP) for Each Element:	0.7 bar (10 psi)

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