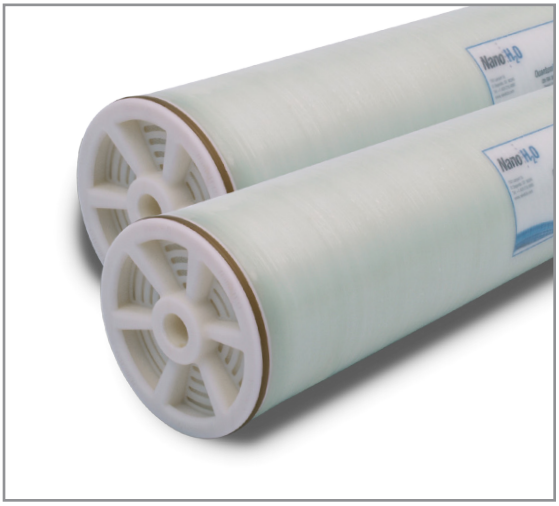
# *Quantum*Flux (Qfx)

## Seawater Reverse Osmosis (RO) Element

## Qfx SW 400 R

## Overview



$NanoH_2O$'s thin-film nanocomposite (TFN) ***Quantum*Flux** 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 patent-pending technology significantly increases membrane permeability.

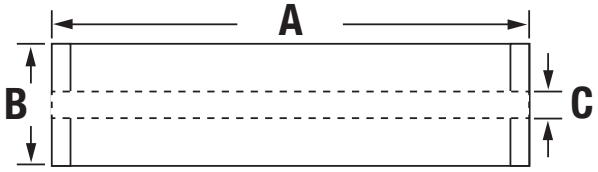
- Industry-standard flux with highest salt rejection
- Standard 8-inch spiral wound element design
- Easy to retrofit existing RO plants
- NSF Standard 61 Certified
- NEW Anti-telescoping device with raised lip and bi-directional seal for easy element loading and removal

## Product Specifications

Configuration: 8-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 400 R | 34 (9,000) | 99.75 | 99.85 | 37 (400) | 28 | 93 |

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 | Weight kg (lbs.) |
|---|---|---|---|---|
| Qfx SW 400 R | 1,016 mm (40 in.) | 200 mm (7.9 in.) | 28.6 mm (1.125 in.) | 16.4 (36) |

## Operating Specifications

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

| | |
|---|---|
| Max. Applied Pressure: | 8.27 MPa (1200 psig) |
| Max. Chlorine Concentration: | < 0.1 ppm |
| Max. Operating Temperature: | 45°C (113°F) |
| pH Range, Continuous (Cleaning): | 2-11 (2-13) |
| Max. Feedwater Turbidity: | 1.0 NTU |
| Max. Feedwater SDI (15 mins): | 5.0 |
| Max. Feed Flow: | 17.0 $m^3/h$ (75 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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