

FG-SpiraCore™ R990 HS Reverse Osmosis Membrane Element Series

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PCI Membranes® sanitary reverse osmosis (RO) membrane elements, 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.



Characteristics

Membrane	R990
Material	Polyamide
Outer wrap	Hard-shell

Regulatory Status

Compliant with US FDA CFR Title 21, EC Reg. No. 1935/2004, and EU Reg. No. 10/2011. Halal certificate by the Islamic Food and Nutrition Council of America (IFANCA). Kosher certificate by Committee of Kashrut.

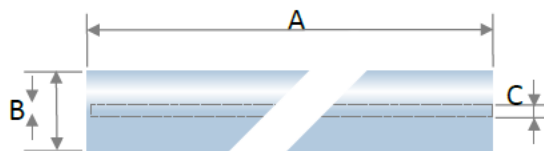
Limits

Max Operating Pressure	55 bar (800 psi)
Max Pressure Drop	1 bar (14.5 psi)
Max. Operating Temperature	50 °C (122 °F)
Max. Cleaning Temperature	55 °C (131 °F)
Operating pH range	2 – 11
Cleaning pH Range	< 0,1 ppm

Area ft² (m²)

R8038-990-080-31-S03	370 (34)
R8038-990-080-46-S03	290 (27)

Updated 28 September 2026



Dimensions

Size	A ^[1] [mm (inch)]	øB ^[2] [mm (inch)]	øC ^[3] [mm (inch)]	D [mm (inch)]
R8038-990-080-XX-S03 ^[4]	965 (38)	200.5 (7.9)	28.9 (1.138)	/

[1] Tolerance: -2~0mm

[2] Tolerance: -2~0mm

[3] 8038 tolerance: -0.2~0mm

[4] XX : 31 mil or 46 mil

Notes:

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

(2) Consult PCI Membranes® when intending to operate at elevated pressure, temperature, concentrations.

Handling

Water quality for cleaning and diafiltration. Maximum feed turbidity is 1NTU. Maximum feed SDI is 5.0 (15minutes test).

Operation. Stated operational conditions are valid and the rules for installation, cleaning, water and preservation have to be adhered. PCI Membranes® approved cleaning detergent, anti-foam, polymers, other chemicals and filter-aids lubricants can be applied only. For further questions, do not hesitate to contact our service engineer.

Lubricants. During installation, use only water or glycerin to lubricate seals. The use of petroleum or vegetable-based oils or solvents may damage the element and void any warranty.

Preservation and Storage. Plan ahead to use new membranes. The element should be stored in a sealed bag, at 4 – 30 °C (39 – 86 °F). Storage solutions should be made with: 1 % w/w sodium metabisulfite.

Chemical Exposure. Residual chlorine concentration during CIP would be <0.1ppm

Cleaning. PCI Membranes® modules may be put into production after having gone through the first cleaning prescribed by PCI Membranes® on product packing notes or given differently by PCI Membranes®.

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