

# PX Q400: THE GOLD STANDARD FOR HIGH-PRESSURE REVERSE OSMOSIS

Our most efficient, highest-capacity PX available for high-pressure reverse osmosis

## The Lowest Projected Life Cycle Cost with Proven Reliability for Decades

The PX Q400 is Energy Recovery's highest-capacity pressure exchanger, offering best-in-class performance from our trusted, leading PX® Pressure Exchanger® with up to 98% efficiency. Thanks to its high performance and lower maintenance, the PX Q400 delivers significant energy and cost savings and offers the lowest projected life cycle cost of any proven energy recovery device (ERD) for seawater reverse osmosis (SWRO) desalination and wastewater treatment. At 77 dB, the PX Q400 is also our quietest PX yet.

## Easy to Install and Maintain

Constructed from corrosion–resistant ceramic and designed with only one moving part, the PX Q400 is reliable, easy to use, highly durable, and ideal for harsh environments. These ceramic components are machined inhouse using our vertically integrated and highly specialized manufacturing processes, which create precision down to the micrometer level and a consistently high–performing product trusted worldwide.

The PX Q400 supports a 25-year design life with no scheduled maintenance, leading to incredibly low life cycle costs and high uptime. Its flexible design and simple installation make it easy to incorporate into new facilities or retrofits.



#### BENEFITS1

#### **Highly Efficient:**

 At 98%, it offers the highest efficiency at the highest flow compared to our other PX Pressure Exchanger products

#### Reliable:

 Industry-leading 25-year design life and 99.8% uptime

#### Low Mixing:

<3% volumetric mixing resulting in higher system performance

#### Higher Capacity:

 At 400 gpm, it's our highest capacity PX yet, which results in 25% fewer devices compared to the Q300<sup>2</sup>

#### **Quiet Performance:**

Our quietest PX yet at 77 dB



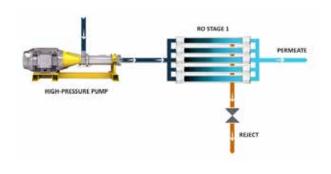
<sup>&</sup>lt;sup>2</sup>Depending on the plant size.



### How it Works

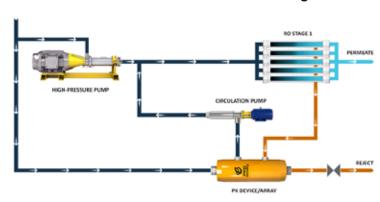
The PX Q400 uses our PX technology, which directly applies hydraulic energy from the high-pressure reject stream to incoming low-pressure feedwater. With only one moving part driven by fluid pressure and a direct fluid-to-fluid energy transfer, nearly all unused hydraulic energy is recirculated in the RO process, minimizing the overall energy needed. At 400 gpm, the PX Q400 is our highest capacity PX yet, resulting in 25% fewer devices compared to the Q300.\*

#### **SWRO Without Energy Recovery Device**



<sup>\*</sup>Depending on the plant size.

#### **SWRO With the PX Pressure Exchanger**



#### **POWER MODEL PRO**

Power Model Pro is a secure, easy-to-use cloud-based product configurator tool that allows you to optimize the hydraulic pumping system of a reverse osmosis system using our products.

To register, reach out to your sales representative or contact us at www.energyrecovery.com/contact.



## Energy Recovery - Optimizing Energy, Maximizing Savings

Energy Recovery (Nasdaq: ERII) is a trusted global leader in energy efficiency technology for the water treatment industry. Building on our gold-standard pressure exchanger technology platform, we design and manufacture reliable, high-performance solutions that generate cost savings, increase energy efficiency, and reduce carbon emissions across desalination, wastewater treatment, and other water treatment applications. With a strong foundation in desalination, Energy Recovery has delivered transformative solutions that increase operational efficiency and provide a positive environmental impact to water producers worldwide for more than 30 years. Headquartered in the San Francisco Bay Area, Energy Recovery has manufacturing and R&D facilities in California, with sales and on-site technical support available globally.

For more information, please visit www.energyrecovery.com or contact us at www.energyrecovery.com/contact.

