

PX Q400

Our most efficient, highest-capacity PX available for seawater reverse osmosis desalination facilities.

The lowest life cycle cost of any energy recovery device in its category

The PX Q400 offers best-in-class performance from Energy Recovery's trusted, leading PX[®] Pressure Exchanger[®] technology with up to 98% efficiency. Delivering energy and cost savings, the PX Q400 offers the lowest life cycle cost of any energy recovery device (ERD) for seawater reverse osmosis (SWRO) desalination, thanks to high performance and lower maintenance. 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 desalination environments. These ceramic components are machined in-house using our vertically integrated and highly specialized manufacturing processes, which create precision down to the micrometer level and a consistently high performing product that is trusted around the world. The PX Q400 supports a 25-year design life with no scheduled maintenance, leading to incredibly low life cycle costs and high uptime. With a flexible design and simple installation, it is easy to incorporate into new facilities or retrofits.

By The Numbers



98% efficiency



25% fewer devices needed to achieve the same output compared to the Q300*



Capacity of **400 gpm** per module



<3% volumetric mixing



77 dB sound performance

PX Q400

BENEFITS

- **Highly efficient** - At 98%, it offers the highest efficiency at the highest flow compared to our other PX Pressure Exchanger technology products
- **Lower 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*
- **Quietest performance** - Our quietest PX yet at 77 dB sound performance
- **Reliable** - Industry-leading 25-year design life
- **Lowest life-cycle cost** - Offers the lowest life cycle cost of any ERD for seawater reverse osmosis (SWRO) desalination due to lower maintenance and operational expenditures
- **Flexible performance** - Compatible with a wide range of pressure levels up to 1200 psi (83 bar)
- **Service and support** - Global team of experts ready to assist you with system design, installation, retrofitting, and more

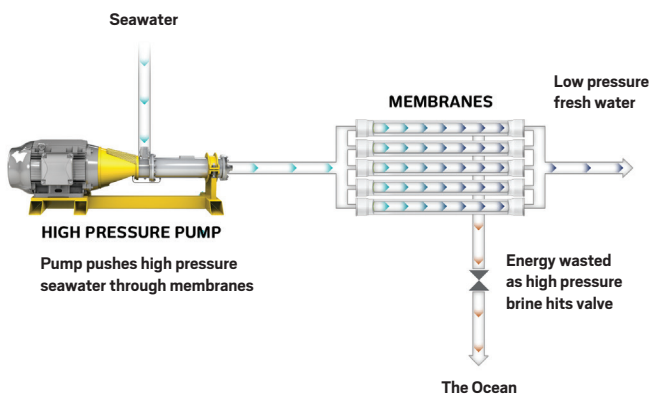


For the last 30 years, we've pioneered technologies that have become the industry standard for energy recovery solutions.

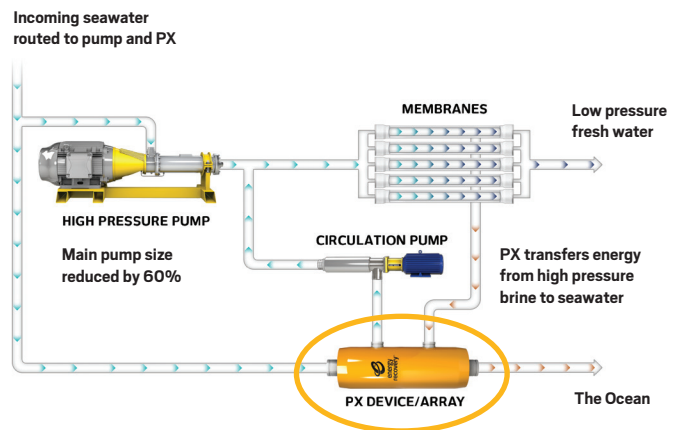
How it Works

The PX Q400 uses our proprietary PX technology which directly applies hydraulic energy from the high pressure reject stream of SWRO processes to incoming low pressure seawater. 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 SWRO process, minimizing the overall energy needed to desalinate seawater. At 400 gpm, the PX Q400 is our highest capacity PX yet which results in 25% fewer devices compared to the Q300.*

SWRO without Energy Recovery Devices (ERDs)



SWRO with the PX Pressure Exchanger



THE MOST TRUSTED ERD IN SWRO DESALINATION

Energy Recovery has spent decades perfecting the reliable, field-proven, and trusted PX Pressure Exchanger technology. Not only have we installed over 25,000 PX ERDs in over 100 countries, but we are the supplier of PX pressure exchangers to the largest floating desalination facility in the world. The PX Q400 further innovates and improves upon what came before—enhancing efficiency, capacity, reliability, and value to ensure it remains the most trusted ERD in seawater reverse osmosis desalination.

Ready to learn more about how our new flagship energy recovery device can benefit your operations? Contact us at desalsales@energyrecovery.com.