



**VP-3471 | VP-4671 | VP-6891**

**PX Circulation Pump™**

Making Desalination Affordable®



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PX Circulation Pump™



The ERI® PX Circulation Pump is designed for use in seawater reverse osmosis (SWRO) systems in conjunction with ERI's PX Pressure Exchanger® (PX®) energy recovery devices. It is a vertical inline pump with a high pressure design driven by a Totally Enclosed Fan Cooled (TEFC) motor. The PX Circulation Pump boosts the pressure in the high pressure flow of a SWRO energy recovery system to make up for the small pressure losses that occur through the membranes, the PX units and the associated piping. The pump is distinctively designed to perform in seawater and brackish water applications. The PX Circulation Pump handles well in high operating pressures and corrosive seawater environments while consuming minimal energy to provide a small boost to the high pressure flow.

It achieves superior performance through superior design. The unique shaft seal vent [SSV] is an added safety feature for start-up, that extends the life of the pump under normal operating conditions. The cartridge type mechanical seal is made with high-performance silicon carbide sealing face specifically designed for continuous reliable service at process pressures up to 1200 psi/83 bar. The PX Circulation Pump motors are equipped with extra heavy duty thrust bearings for long service lives. All wetted metal components in the PX Circulation Pumps are duplex or equivalent stainless steel. It is the only pump of its type in the market made to meet tough seawater requirements.

The VP family of PX Circulation Pumps are designed for SWRO plants with permeate production rates ranging from 640 to 12,000 m<sup>3</sup>/day.

## PX CIRCULATION PUMP PRODUCT LINE

Model	Capacity	
<b>VP-3471</b>	40 – 120 m <sup>3</sup> /hr	175 – 530 gpm
<b>VP-4671</b>	90– 250 m <sup>3</sup> /hr	400 – 1,100 gpm
<b>VP-6891</b>	250 – 500 m <sup>3</sup> /hr	1,100 – 2,200 gpm

### BENEFITS

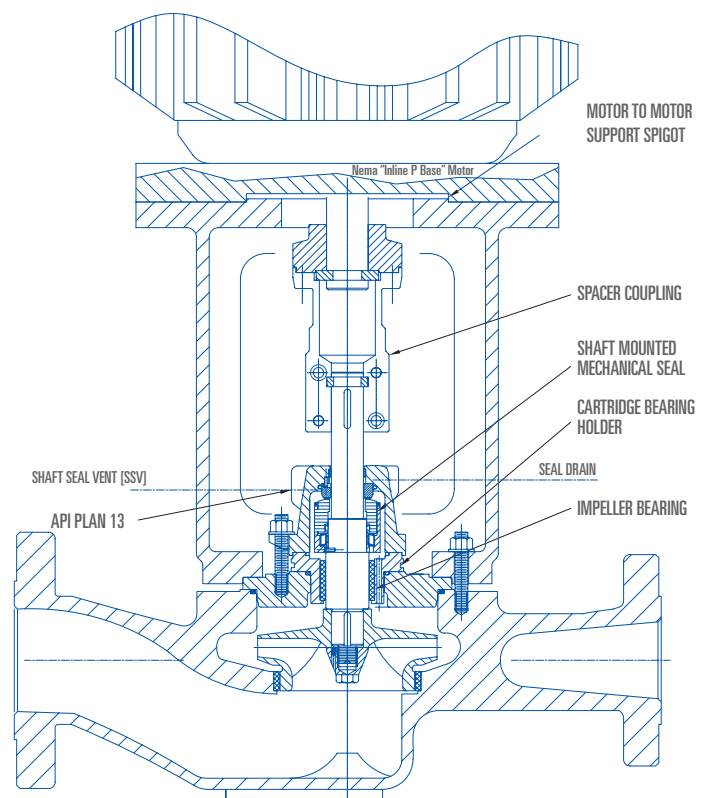
- Compact Vertical Inline Design
- High Efficiency
- Designed for Long Life and Low Maintenance
- Low Energy Consumption
- Reliable Performance in High Operating Pressures

### STANDARD FEATURES

- Specially Designed for SWRO/BWRO Applications
- Seal Flush with Start-up Vent Valve
- ASME 600# Flanges for Easy Installation
- 50/60 Hz TEFC Motor, Ready for VFD Control
- Simple Disassembly for Easy Mechanical Seal Maintenance
- Upgraded Paint System for Corrosion Resistance

### MATERIALS

PX Circulation Pumps are intended for continuous operation in the most difficult and corrosive seawater conditions. All parts incorporate non-corroding duplex stainless steel or equivalent.

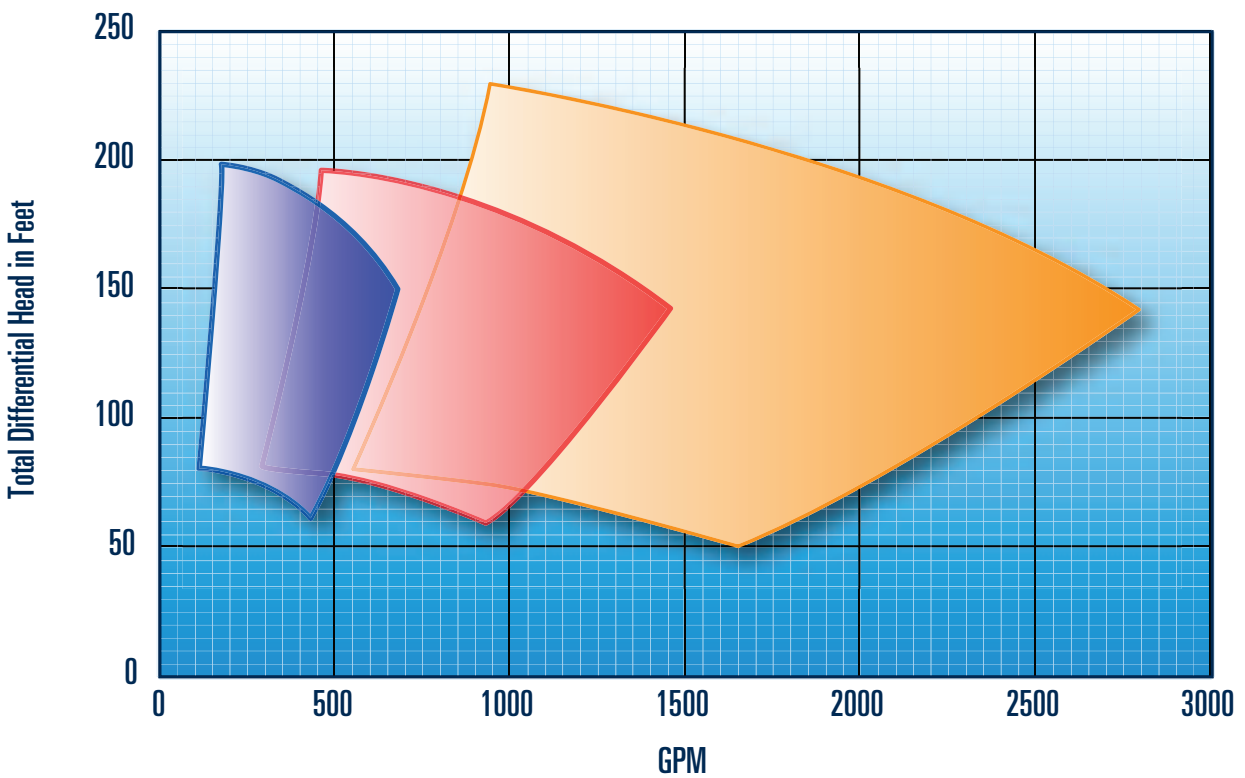
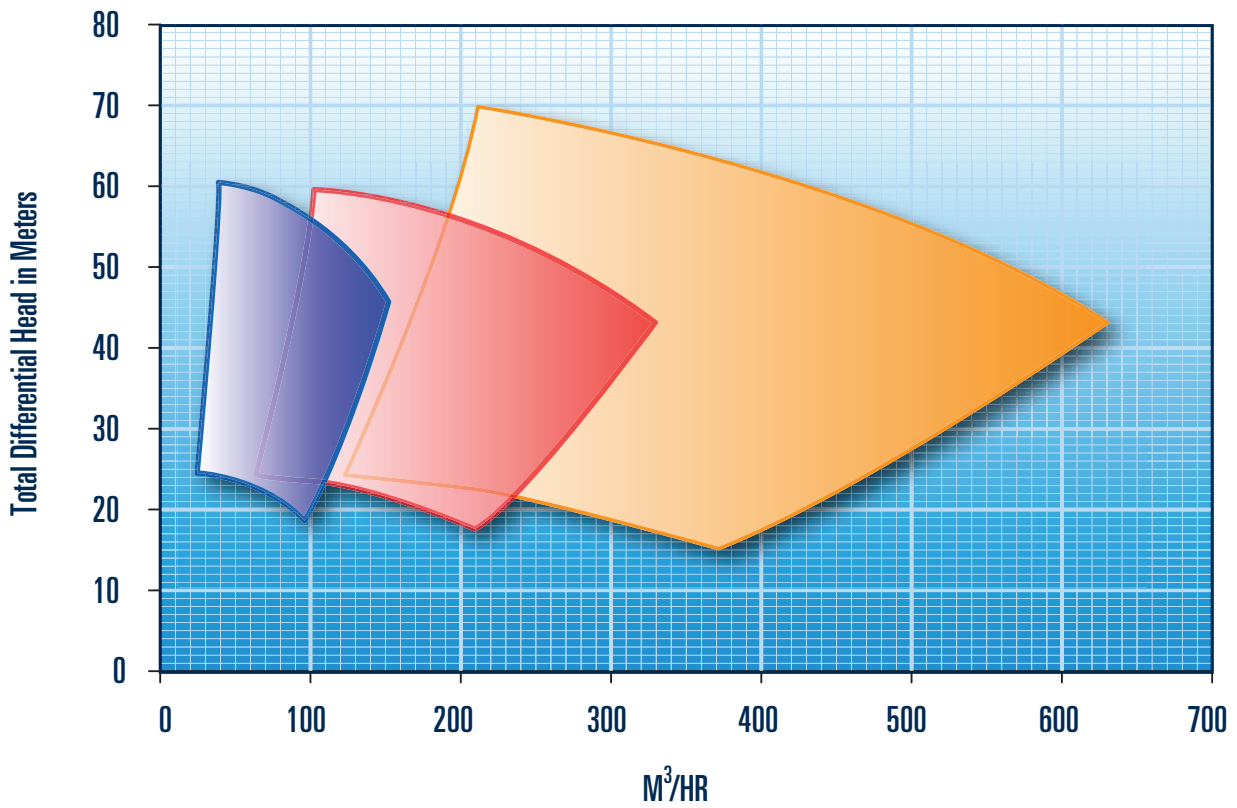


### ERI PX Circulation Pump Performance Curve Range

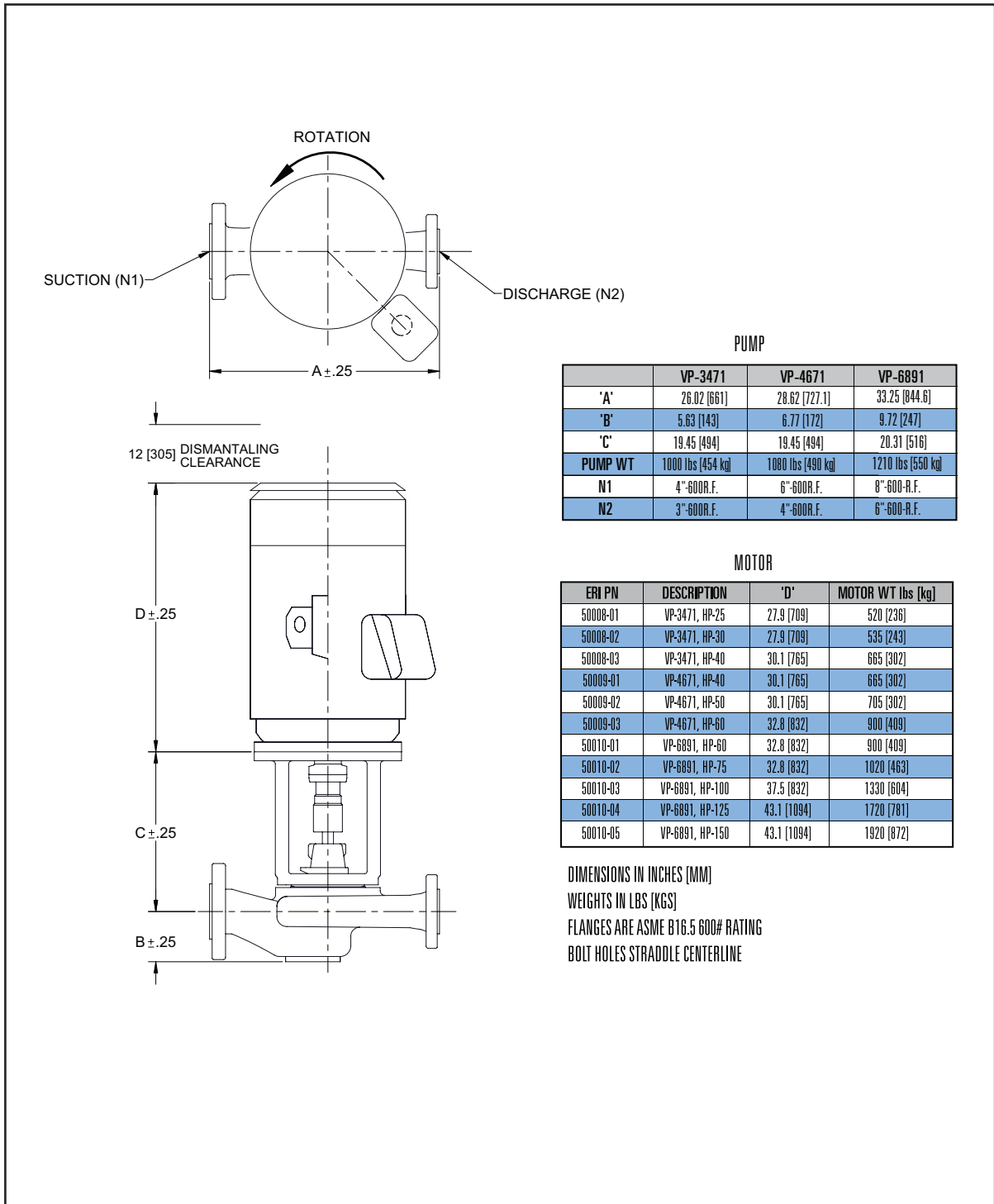
VP-3471

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External Dimensions



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