

Water Technologies & Solutions
fact sheet

PROflex* LT4

RO and NF equipment from 1,100 to 19,800 gpd (0.75-13.75 gpm, 0.2-3.0 m³/h)



overview

With a focus on light industrial and commercial applications and end-users, the PROflex LT is both an evolution of popular E-Series brackish water RO and NF systems and an extension of the PROflex product line. With this new offering, you can continue to expect the quality and durability that all SUEZ systems provide. The PROflex LT will have the optimized simplicity and economics expected of the E-Series systems but incorporate the powerful combination of further cost savings and configurability in the existing PROflex systems.

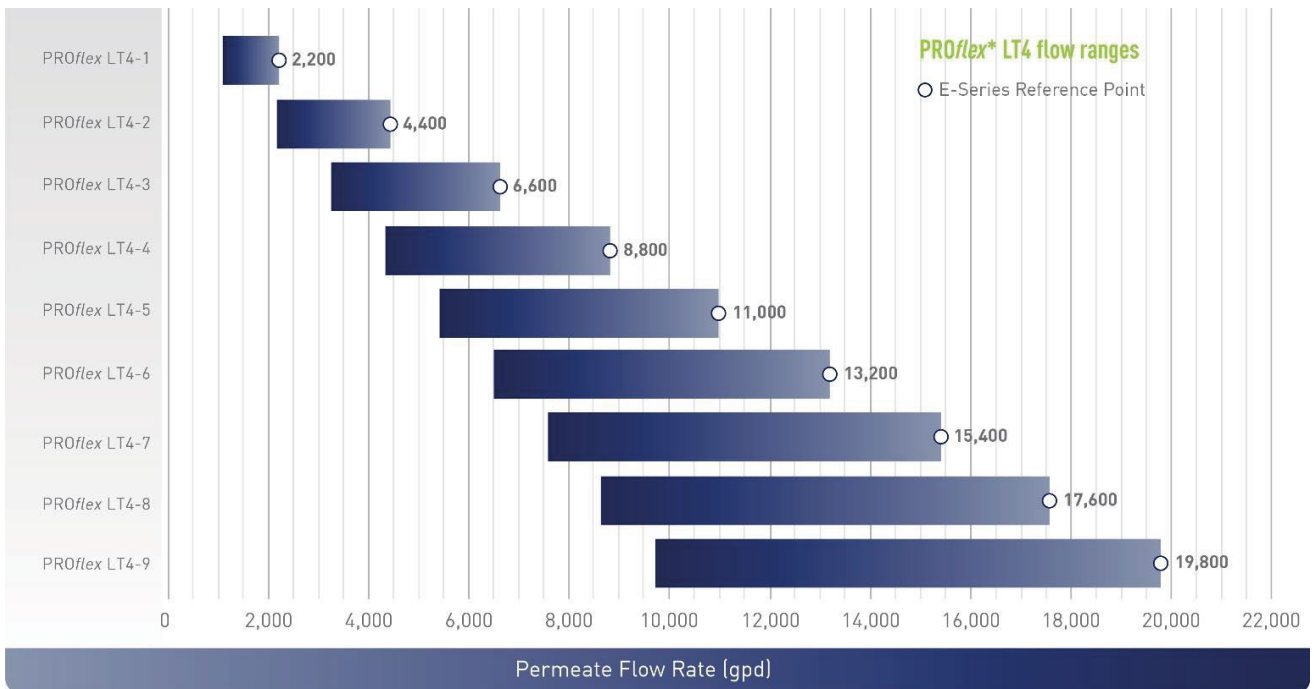


Figure 1: PROflex LT4 flow ranges including the relevant prior E-Series reference point demonstrating the high flux and fixed flow rate designs of the prior E-Series systems. PROflex LT systems can be configured using the flexConfigurator to lower flux and flow as shown in the chart.

flexible design

- PROflex LT4 has nine 4" element default configurations
- Improves upon the prior E-Series platform by:
 - allowing flexConfigurator users to optimize their system to fit their needs with their choice of pump, permeate flow rate, and flux rate
 - offering further options to configure their system with only the features and components that they want, including new features such as permeate divert and VFDs, or a CIP pump and chemical feed package
 - access specification sheets, drawings, and detailed information for unique configured system

SUEZ flexConfigurator

www.suezwatertechnologies.com/flexconfigurator

Our expertise at your fingertips, on your schedule, while only paying for what you need.

true flexibility to design a system you want

PROflex LT offers the flexibility to choose a system at an aggressive or conservative design to meet the capital and flux requirements of your specific application. Figure 1 shows the PROflex LT4 product line and the flow ranges. The flow ranges are the hydraulic limits with each model. Users should explore and choose their optimal system by determining:

- desired permeate flow range
- temperature of the water
- square footage of the membranes needed (or flux limits) using Winflows*
- desired recovery
- 50 or 60 Hz frequency

The various models and options in the flexConfigurator will allow you to see changes to the capital investment and weigh different design considerations.

default features

All PROflex LT4 systems come standard with the following features:

- Tonkaflo* pump
- improved access to Tonkaflo pump for easier maintenance

- new Horner X2 PLC/HMI is the default option that runs with free programmable Cscape software
- mounted motor starter
- 1-micron pre-filter
- elements shipped loose, with system shrink wrapped and on a pallet

default instrumentation and control

- pre and post filter pressure gauges
- permeate and concentrate flow sensors
- pre and post local membrane element pressure gauges
- flow control valves – concentrate and recycle
- feed throttle valve
- automatic inlet shut-off valve (electric)

default monitoring and alarms

- motor starter fault with machine shutdown
- machine control
 - remote on/off capability or
 - permeate level analog control (comes with low and high alarms)
- low permeate and low concentrate flow alarms
- pretreatment lockout
- chemical feed control (start/stop)
- common alarm output signal

configurable options available

As seen by using the flexConfigurator, example configurable options include:

- multiple pump options – use Pump Tools and Winflows to select the right pump for your application
- membrane options:
 - high rejection elements
 - low energy elements
 - low fouling elements
 - nanofiltration elements
- housing/valves/connections options:
 - CIP connections and chemical injection port
 - auto flush solenoid
 - stainless steel membrane element housings
 - permeate divert valve (requires permeate conductivity instrumentation)
- electrical options:
 - motor starters removed
 - VFD upgrade
 - 50 and 60Hz with various voltages

configurable options available (continued)

- instrument and PLC options:
 - Horner X2 Controller – default controller, with the following options:
 - o permeate conductivity (with high conductivity alarm)
 - o recycle flow sensor
 - o inlet pressure switch (with low pressure alarm)
 - o inlet pH (with high/low alarm)
 - o inlet temperature (with high temperature alarm)
 - Horner X4 Controller – upgrade option. Same option choices as X2, plus the following:
 - o P.I. D. control of pH (with high/low alarm)
 - o P.I.D. control of pump speed (requires VFD)
 - o permeate divert (with high conductivity alarm)
 - o CIP pump control (pump not included)
 - Horner X4 Plus Controller, upgrade option. Same option choices as X4, plus the following:
 - o inlet conductivity which displays conductivity and membrane system rejection on HMI (with low rejection alarm)
 - o pressure transmitters – 4 total – pre and post filter and membrane (with high prefilter pressure drop and high membrane element pressure drop alarms)
 - no instrument or controller option
- shipping and packaging options:
 - elements loaded in skid
 - system shipped in wooden crate