

Water Technologies & Solutions  
fact sheet

# PROflex\* LT8

RO and NF equipment from 14,400 to 288,000 gpd (10-200 gpm, 2.5-45 m<sup>3</sup>/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 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.

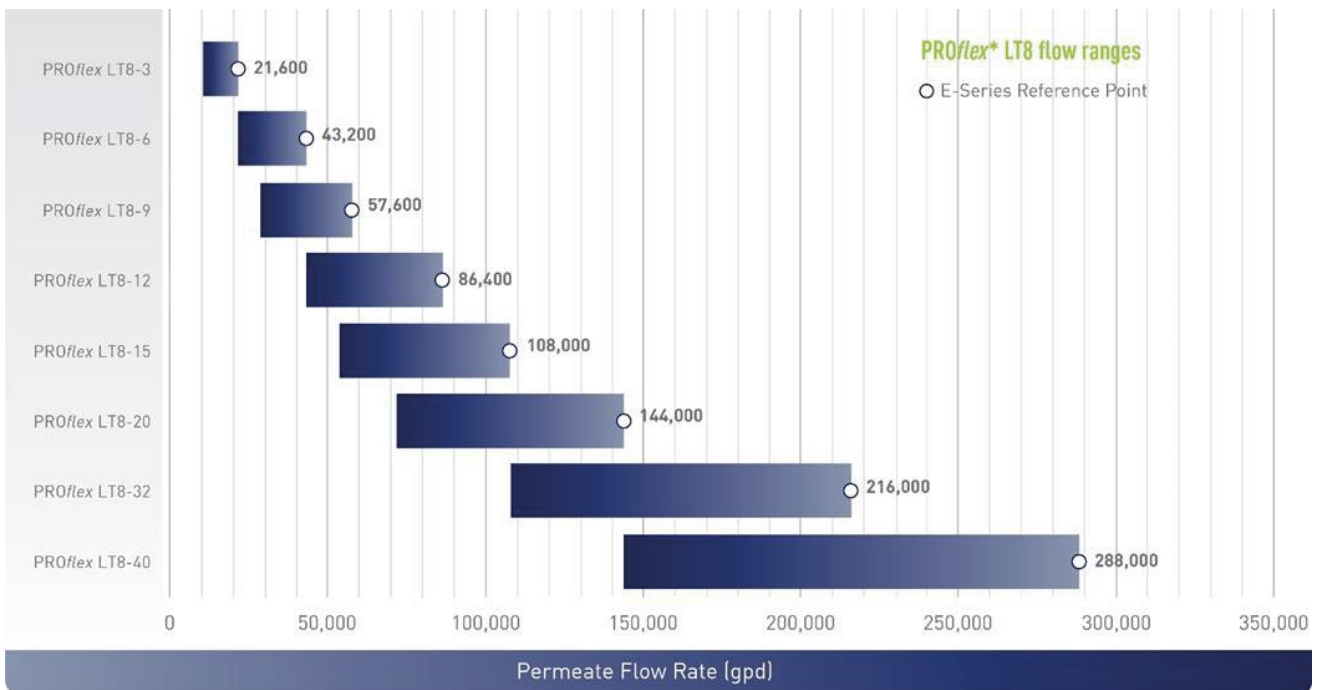


Figure 1: PROflex LT8 flow ranges including the relevant prior E-Series reference point demonstrating the high flux and fixed flow rate designs of the prior E-Series systems. PROflex LT systems can be configured using the flexConfigurator to lower flux and flow as shown in the chart.

### flexible design

- PROflex LT8 has eight 8" 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](http://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 LT8 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 LT8 systems come default with the following features:

- Tonkaflo\* pump
- improved access to Tonkaflo pump for easier maintenance
- larger instrument panel allows for mounting additional field equipment and instrumentation
- new slip stream for instruments to allow for easier maintenance

- new Horner X4 PLC/HMI is the default option that runs with free programmable Cscape software
- motor starter
- 1-micron pre-filter
- elements are shipped loose, and will have a wood frame under the skid for easier mobility

### 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
- CIP connection – valves included
- air actuated automatic inlet shut-off valve

### 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
- inlet pressure switch (with low pressure alarm)
- permeate conductivity (with high conductivity alarm)
- inlet temperature (with high temperature alarm)

### configurable options available

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

- multiple Tonkaflo 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:
  - auto flush solenoid
  - electric valve actuators (selecting this option applies to both inlet and permeate divert)
  - stainless steel membrane element housings
  - permeate divert valve (requires permeate conductivity instrumentation)

### configurable options available (continued)

- electrical options:
  - motor starters removed
  - VFD upgrade
  - 50 and 60Hz with various voltages
- instrument and PLC options:
  - Horner X4 Controller – default controller, with the following options:
    - recycle flow sensor
    - inlet pH with P.I. D. control (with high/low alarm)
    - P.I.D. control of pump speed (requires VFD)
    - permeate pressure switch (with high pressure alarm) and concentrate pressure switch (with high pressure alarm)
    - permeate divert (with high conductivity alarm)
  - Horner X4 Plus Controller, upgrade option. Same option choices as X4, plus the following:
    - inlet conductivity which displays conductivity and membrane system rejection on HMI (with low rejection alarm)
    - inlet oxidation-reduction potential (ORP, with high ORP alarm)
    - pressure transmitters – 4 total – pre and post filter and membrane (with high prefilter pressure drop and high membrane element pressure drop alarms)
  - Allen Bradley, upgrade option. AB850 Series with 4" HMI. Same option choices as X4 plus.
  - no instrument or controller option
- shipping and packaging options:
  - elements loaded in skid
  - system shipped in wooden crate