

GE PRO ELITE WATER SOFTENERS

LIGHT COMMERCIAL AND RESIDENTIAL USE

Standard Features:

¾" and 1" Valve - Performa™ Top mount
 ERCa Electronic Timer
 Polyglass Mineral Tanks
 Timed Brine Refill System.
 Resin polystyrene 10% dvb cl
 Single point ABS distributor
 Remote Monitor
 Low Salt on Regen Indicator
 Differential Conductivity Regeneration Initiation

Available in three Models:

Simplex Gold Probe
 Twin Gold Probe
 Twin Alternating Demand Regeneration (1)

Operating Conditions:

Water pressure 25 to 120 psi
 Cold water operation
 100°F maximum temperature

(1) See specifications for Features of Twin Alternating Units



Application Table:

Model	50	60
Mineral Tank	12x48	12x48
Resin Volume (ft ³)	1 ½	2
Gravel (lbs)	15	15
Brine Tank – Triangular	21"Δ x37"	21"Δ x37"
Salt Storage (lbs)	320	320
Brine Valve (in)	¾	¾
Capacity (Kgr)	49	61
Salt per Regen (lbs) (Default)	15	20
Continuous Flow ² (gpm)	21	20
Peak Flow ³ (gpm)	28	27
Backwash Rate ⁴ (gpm)	4	4
Height ⁵ (in)	60 ½	60 ½
Depth (in)	18	18
Width (in)	42	43
Weight (lbs)	160	225
Width Twin (in)	66	68
Weight Twin (lbs)	300	430



Notes:

- Capacities are based on softening 20 grains per gallon at intermittent flow rates and are 95% of laboratory results.
- Continuous flow rates are based on a 15 psi pressure drop.
- Peak flow rates are based on a 25 psi pressure drop.
- Drains must be able to dispose of water at the listed rate for up to 20 minutes.
- Dimensions listed are actual unit height.
- Flow rates are based on the Performa™ Series valve.

PART NUMBERS FOR COMMERCIAL APPLICATIONS:**Pro Elite Model 50**

Part No.	Description
934589	Pro Elite 50 - 3/4" Simplex
934589-T	Pro Elite 50 - 3/4" Twin Parallel
934589-11	Pro Elite 50 - 3/4" Twin Alternating
934589-1	Pro Elite 50 - 1" Simplex
934589-1-T	Pro Elite 50 - 1" Twin Parallel
934589-1-11	Pro Elite 50 - 1" Twin Alternating

Pro Elite Model 60

Part No.	Description
934590	Pro Elite 60 - 3/4" Simplex
934590-T	Pro Elite 60 - 3/4" Twin Parallel
934590-11	Pro Elite 60 - 3/4" Twin Alternating
934590-1	Pro Elite 60 - 1" Simplex
934590-1-T	Pro Elite 60 - 1" Twin Parallel
934590-1-11	Pro Elite 60 - 1" Twin Alternating

FOR RESIDENTIAL APPLICATIONS:

Part No:
934589

Description:
Pro Elite Model 50 – ¾"

Specifications – Simplex and Twin Parallel (-T):

Mineral Tank. The mineral tank shall be "polyglass" consisting of an inner shell of virgin polyethylene and an external shell of continuous fiberglass roving. Tanks shall be rated at 150 psi operating pressure, 120°F operating temperature with 2½"-8 UN threaded top opening. Tank shall be protected by a molded HDPE cabinet designed to protect the tank and the valve and provide an aesthetic look.

Internals. The distributor shall be a 2½" Ø single point molded distributor head with 1½" of slotted length and a ¾" female socket welded connection. The slots shall be 0.012" - 0.016" wide to retain mineral and the total slot area shall be equal to or larger than the unit pipe size. The distributor pipe shall be 1.05" O.D. white PVC. An upper resin basket is included.

Media. The resin shall be sodium form polystyrene 10% divinyl benzene cross linked resin with clear spherical beads. Resin beads shall be 16-50 US Standard Mesh with a particle size range of 0.3 to 1.2 mm. The resin shall be clean and packaged in sealed plastic bags weighing 55 lbs or less.

Underbedding. The bottom of this mineral tank shall be filled above the distributor with #20 graded washed flint gravel sieved between 1/8" and 1/16".

Brine System. The brine system shall be of a triangular shape to allow a minimum footprint of the softener components. The brine tank cover shall be held by a mechanical bracket, not a simple molded cover. The brine tank shall be molded HDPE, including a cover. The system shall include a float operated brine valve to prevent overflow during refill. Brine draw is to be timer controlled by the ERCA controller.

Control Valve. The main control valve(s) shall be the Performa™ controlled with electronic controller to actuate the cycles of backwash, brine, slow rinse, fast rinse, and service. The control valve(s) shall be Performa™ 5-Cycle, 100 psi, multi-port control valve(s) with glass filled Noryl-NSF listed material, camshaft, drive motor assembly, and NEMA 3 enclosure (115VAC/60Hz). The valve shall be of a single camshaft design and not use multiple plungers or diaphragm valves.

Controller for Simplex and Twin Parallel Systems. The ERCa shall be designed and programmed to operate with the gold probe analyzer. This system shall directly sense when the resin bed is expended and begin regeneration. The gold probes sense that the bed is expended by measuring differential conductivity between a point in the resin bed and the bottom of the resin bed. The ERCa controller shall have a variable demand function to force regeneration during preset, off peak hours.

Simplex Systems. For Simplex units, hard water by-pass shall be available during all regeneration cycles. For Twin units, hard water by-pass shall not be allowed during regeneration. A twin unit provides a continuous stream of softened water. The drain line connection shall be 3/4" NPT, female.

Twin Parallel Systems. Each unit of a twin parallel system (-T) shall be equipped with gold probe analyzers and operate independently of the other unit. This provides a truly redundant system. The units are set to regenerate at different times of the day to avoid simultaneous regeneration. Twin systems operate in parallel mode with both units on line unless one is in regeneration.

Remote Monitor. Each softener shall have a remote monitor which detects regeneration and low salt conditions.

Preprogrammed. Because of the gold probe analyzers, the units arrive preprogrammed. None of the settings for the controller (other than time of day) are site specific.

Specifications – Twin Alternating (-11):

Mineral Tank, Internals, Media, Underbedding, Brine System Control Valve same as above.

Controller for Twin Alternating Systems. The TA systems shall be demand regenerated by using the ERCd Controller and the internal 1" Turbine Flow™ meter. The ERCd Controller shall have a 28-day variable reserve function with the capabilities to limit regeneration to off peak hours. Twin alternating systems operate with one unit on line and one in regeneration or standby mode.

Remote Monitor. Twin Alternating systems do not have a remote monitor.

Programming. Application specific programming is required since the demand setting varies with the water hardness.