



*"Designed, Tested and Approved for Shipment  
by LWT Engineering Staff"*

## COMMERCIAL WATER SOFTENER

### LWTF SERIES

30,000 TO 1,100,000  
GRAINS CAPACITY



**WATER SOLUTIONS \* COMMERCIAL GRADE  
PERFORMANCE \* CONTINUOUS SOFT WATER \***

(Single, Twin, Triple or Quadruple systems)

**FEATURES:**

The **control valve bodies** are constructed using high quality lead free brass for a longer life. Industry standard 1” to 3” piping connections.

**Hydraulically balanced pistons** move freely along a series of seals and spacers for consistent and reliable performance.

**BENEFITS AND FEATURES:**

- Metered systems dramatically reduces salt and water costs up to 50%.
- High Flow Distributors
- High Capacity Resin
- Low Maintenance

The **five cycle** motor positions the piston during each of the regeneration cycles. All cycles are fully adjustable for those problem water applications. A drain line flow control sized by the tank diameter ensures accurate flow rates during the backwash cycle.

The **brine tank refill** is controlled by the time programmed in the microprocessor and brine line flow control that provides a precise amount of water for brine saturation.

**APPLICATIONS** : Apartment Buildings, Office buildings, Hotels, Restaurants, Resorts, Laundries, Nursing Homes, Manufacturing, Boiler Water Treatment, Hospitals, Schools, Laboratories, RO/DI Pre-Treatment



1” valve



1 ½” valve



2” valve



3” valve

**The Pentair NXT Programmable Microprocessor** provides single, twin, triple or quadruple system capabilities. The controller features calendar day override, twin alternating, progressive demand or parallel application options. Multiple tank applications, progressive demand and diagnostic capabilities are the premiere features of this controller. The progressive demand application allows one to four softeners to be online in proportion to the service demand. One softener is always in service, and the other units automatically come online as the flow increases. As the flow rate decreases, softeners will be removed from service based on the pre-programmed GPM settings. This feature provides uninterrupted flow of soft water 24/7 during variable and peak flows (One auxiliary output is provided to start a chemical feeder, pump or motor application)



**FRP/Composite Pressure Vessel (Non-code)** Industrial grade fiberglass construction provides outstanding durability and higher corrosion resistance than carbon steel vessels (Chemical resistant Vinylester lining is available). Fiberglass vessel weights are about 1/3 less than steel tank vessels. ASME vessels are available 18”-30”.

**Lakeside Provides Resins** that are manufactured using full 8 % DVB. This process provides high chemical and physical stability, lower pressure drop and greater resistance to bead breakage. Lakeside resin is shipped in the sodium form providing immediate soft water for your customer. High tolerance resins are available for chlorine, high temperature, high flow rates and hardness leakage applications.



**The brine tank** is molded of rigid polyethylene that provides the ultimate corrosion resistance and superior strength. The automatic timed fill brine valve ensures a precise brine concentration for optimum performance. A salt grid and platform are utilized to allow only a desired amount of brine to contact the salt, preventing salt bridging. The brine valve with a Teflon coated piston prevents brine tank overflow.



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## OPTIONS

- Skid mounted, pre-piped and pre-wired with isolation valves
- ASME tank certification 18” to 30”
- Pressure Gauge package
- Choice of single, twin, triple or quad packaged systems.

## Operating Specifications:

- **Working Pressure** 30-150psi Temperature 34-110F / Electrical 24v,110v, 220v -50Hz, 60Hz
- **Drain piping Limits:** 10 ft. vertical and discharged to an atmospheric floor drain sized to the backwash rate of the system. Max pipe length 25 ft.

## LWTF Commercial Water Softener

Model	MAX CAP PER TANK @15LB	MIN CAP PER TANK @6LBS	PIPE SIZE	CON GPM 15 PSI	PEAK GPM 25 PSI	RESIN QTY. CU. FT.
LWTF 90-1	90,000	60,000	1”	19	26	3
LWTF 90-1 1/2	90,000	60,000	1 ½”	30	42	3
LWTF 120-1 1/2	120,000	80,000	1 ½”	33	45	4
LWTF-120-2	120,000	80,000	2”	47	64	4
LWTF-150-1 1/2	150,000	100,000	1 ½”	42	55	5
LWTF- 150-2	150,000	100,000	2”	67	85	5
LWTF-210-1 1/2	210,000	140,000	1 ½”	39	52	7
LWTF-210-2	210,000	140,000	2”	60	81	7
LWTF-300-2	300,000	200,000	2”	65	87	10
LWTF-450-2	450,000	300,000	2”	75	98	15
LWTF -450-3	450,000	300,000	3”	145	195	15
LWTF-600-2	600,000	400,000	2”	80	102	20
LWTF-600-3	600,000	400,000	3”	170	215	20
LWTF-750-3	750,000	600,000	3”	177	235	25
LWTF-1100-3	1,100,000	800,000	3”	165	215	37



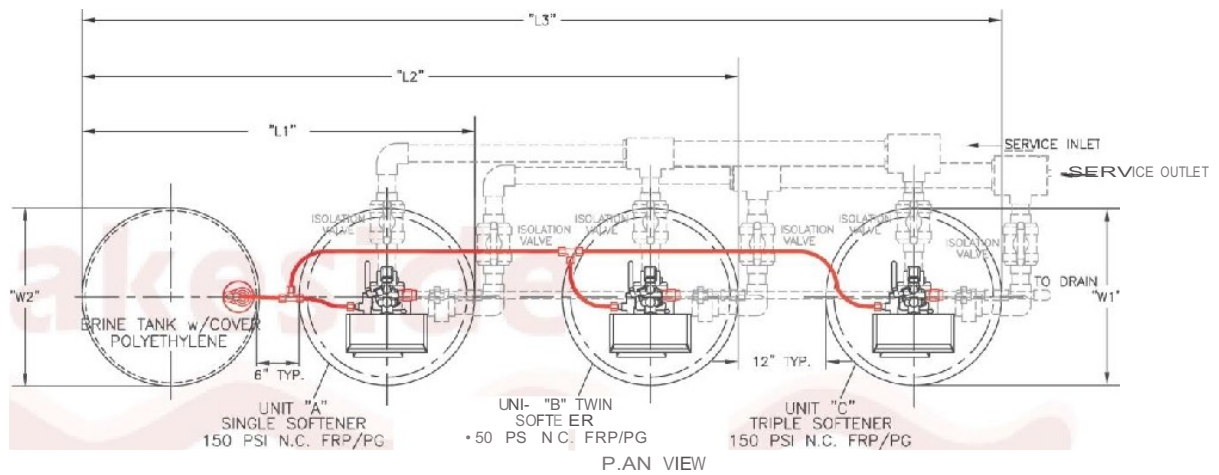
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## LWTF Commercial Water Softener Dimensions

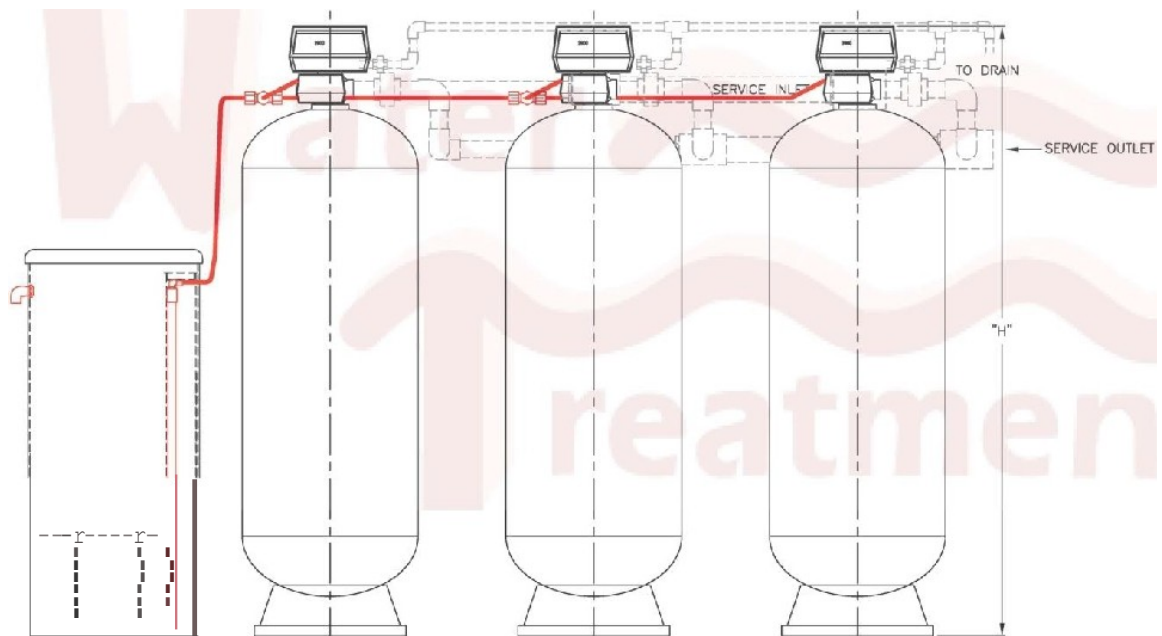
MODEL NO.	RESIN TANK	BRINE TANK	OAH	WIDTH "W1"	WIDTH "W2"	Overall Length		
						SINGLE	TWIN	TRIPLE
LWTF -90-1	14" x 65"	18" x 40"	78	15	15	35	62	89
LWTF -90-1 1/2	14" x 65"	18" x 40"	78	15	15	35	62	89
LWTF-120-1 1/2	16" x 65"	24" x 41"	79	17	25	47	76	105
LWTF -120-2	16" x 65"	24" x 41"	83	17	25	47	76	105
LWTF-150-1 1/2	18" x 65"	24" x 41"	74	19	25	49	80	111
LWTF -150-2	18" x 65"	24" x 41"	78	19	25	49	80	111
LWTF-210-1 1/2	21" x 62"	24" x 54"	74	22	25	52	86	120
LWTF -210-2	21" x 62"	24" x 54"	78	22	25	52	86	120
LWTF-300-2	24" x 72"	30" x 48"	85	25	30	55	92	129
LWTF-300-3	24" x 72"	30" x 48"	85	25	30	55	92	129
LWTF-450-2	30" x 72"	30" x 60"	85	31	35	68	111	154
LWTF -450-3	30" x 72"	30" x 60"	85	31	35	68	111	154
LWTF-600-2	36" x 72"	39" x 48"	85	38	42	83	131	182
LWTF-600-3	36" x 72"	39" x 48"	85	38	42	83	131	182
LWTF-750-3	42" x 72"	42" x 60"	85	44	48	92	148	199
LWTF-1100-3	48" x 72"	50" x 60"	85	50	54	98	160	222

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**LWTF Commercial Water Softener Diagram**



24" MINIMUM CLEARANCE  
 ECO-NETTED .48CM" YFSSEI (S)  
 COR MEDIA LOAD .C,



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