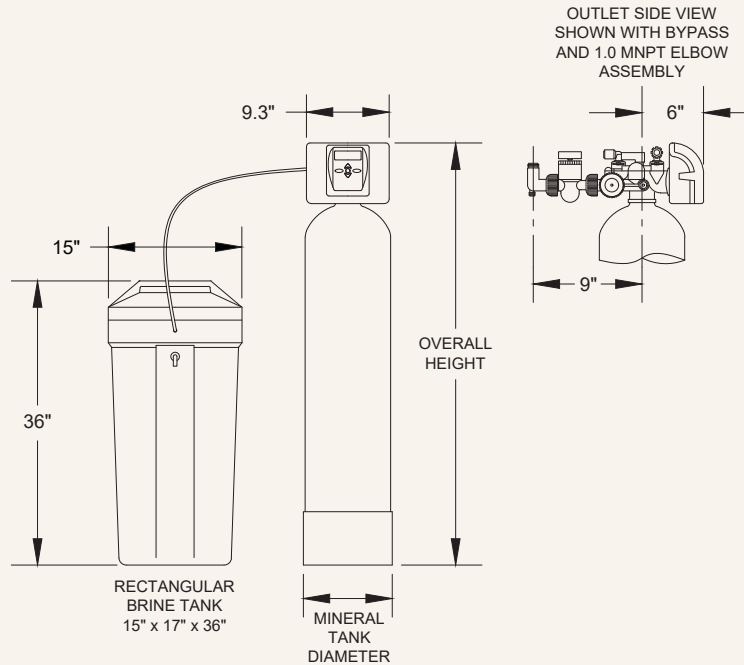


X-FACTOR SERIES LXTAN TANNIN GUARD SOFTENER



LXTAN PROGRAM CYCLES ¹	WATER AVAILABLE TO SERVICE DURING REGENERATION	WATER SOFTENER & TANNINS, ORGANICS AND COLOR REMOVAL	
Model Number		7-LXTAN-100B	
		Minutes	Gallons
1st: Fill -Treated Water into Brine Tank (Programmed in LBS Salt)	Treated Water	5.33	2.67
		8.0 LBS	
2nd: Softening (Minutes)	Treated Water	240	0
3rd: Backwash (Minutes)	Untreated Water	10	17
4th: Regenerant Draw DN & Slow Rinse (Minutes)	Untreated Water	50	18.5
5th: Air Release (90 seconds)	Untreated Water	1.5	2.55
6th: Backwash (Minutes)	Untreated Water	10	17
7th: Rinse (Minutes)	Untreated Water	5	8.5
8th: End	-	-	-
DLFC - Drain Line Flow Control (GPM)	-	1.7	
Total Gallons to Drain ²	-	66.22	
Total Regeneration (Minutes)	-	321.83	
Total Time Untreated Water is Available to Service During Regeneration (Minutes)	-	76.50	

¹ Downflow Regenerant, Prefill Factory Program Settings , Demand Initiated Regeneration (DIR) with 4 Day Override.

² Based on 50 PSI Inlet Pressure.

X-FACTOR SERIES LXTAN TANNIN GUARD SOFTENER

LXTAN SPECIFICATIONS	WATER SOFTENER & TANNINS, ORGANICS AND COLOR REMOVAL
Model Number	7-LXTAN-100B
Inlet/Outlet Fitting Options (Inches) ¹	0.75 - 1.0 ¹ - 1.25 - 1.5
Bypass Included	Yes
Drain Fitting Elbow NPT or OD Poly Tube Size (Inches)	3/4 NPT or 5/8 Tube
Water Pressure Range (PSI)	20 - 100 PSI
Water Operating Temperature Range (°F)	35 - 100 °F
Influent Maximum Water Hardness (GPG)	100 GPG
Influent Maximum Ferrous Iron (PPM) ²	0.5 PPM
Influent Maximum Tannins (PPM) ⁴	3.0 PPM
Plug-In Power Adapter Input (VAC - Hz - A)	120V AC - 60 Hz - 0.35 A
Plug-In Power Adapter Output (VDC - A)	15V DC - 0.5 A
Plug-In Power Adapter Cord Length (FT)	15 FT
PC Board Relay Terminal Block DC Output (V)	12V DC
3 Volt Pre-Installed Lithium Coin Cell Battery (Type)	CR2032
Recommended Service Flow Rate Range (GPM)	1 to 5 GPM
Service Flow Rate at 15 PSI Pressure Drop (GPM) ³	14 GPM
Overall Height (Inches)	67.6
Mineral Tank Size: Diameter x Height (Inches)	10" x 60"
Mineral Tank Dome Hole Plug	No
Distributor Type	Mid-Plate & Bottom Plate
Top Basket Distributor	Yes
Top Deflector	No
Cubic Feet of TOC/Tannin Removal ⁴ Anion Resin in Bottom Chamber (LBS)	0.5 (22 LBS)
Cubic Feet of Water Softener Cation Resin in Top Chamber (LBS)	1.0 (52 LBS)
Brine Tank Size (Inches) ⁵	15 x 17 x 36
Brine Tank Capacity (LBS Salt)	275 LBS Salt
DLFC - Drain Line Flow Control (GPM)	1.7 GPM
RFC - Brine Line (Re-Fill) Flow Control (GPM)	0.5 GPM
Injector Size (Color)	1E - White
Softener Grains Capacity (Grains @ LBS Salt) ⁶	24,000 @ 8.0
Water to Drain at 50 PSI Inlet Pressure (Gallons)	66.22

¹1.0 MNPT Elbow Standard - Options Available

²Ferrous iron ("clear-water iron"): Water comes out of the faucet clear, but turns red or brown after standing. Ferrous iron less than 0.3 ppm (mg/L) will not cause staining. Higher ferrous iron levels will require iron pre-filtration. Ferric iron is insoluble and should be removed by pre-filtration.

³Flow rate shown at 15 PSI pressure drop exceeds resin manufacturer's recommended maximum flow rates. Selecting a system by pressure drop alone does not guarantee that the system will provide softened water and effectively remove tannins.

⁴Tannins are naturally occurring organic material, byproducts of fermentation, i.e. created as water passes through peaty soil and decaying vegetation. Tannins can cause water to have anywhere from a faint yellow to brown tea-like color, causing staining. A tannin concentration of 0.5 ppm is typically considered the minimum threshold for requiring treatment due to staining. This residential system is designed to treat tannin concentrations in the 0.5 to 3.0 ppm range.

The amount of tannin removal resin used is particularly effective in removing the lighter yellow to medium tea-colored staining variety of tannins. The tannin removal resin located in the tank's lower chamber is a strong base anion resin with larger pores (macroporous), specifically designed for tannin removal. Tannins are removed by ion exchange as well as absorption. When tannins are exchanged onto the anion resin, they will tend to travel into the middle of the resin bead. This movement makes tannins very difficult to remove from the resin bead during regeneration. For this reason, frequent regeneration is required to reduce the potential for fouling. The day override is factory set to 4; it is not recommended to increase this setting. If staining persists, reduce the day

override setting to 2 or 3 days.

The amount of tannin removal resin used in this system has an organic capacity of approximately 1,000 ppm-gallons.

If the water has a tannin concentration as low as 0.5 ppm ...

1,000 ppm gallons/0.5 ppm = 2,000 gallons, i.e. 2,000 gallons can be treated between regenerations; we recommend no more than 4 days between regenerations.

If the water has a tannin concentration as high as 3.0 ppm ...

1,000 ppm gallons/3.0 ppm = 333 gallons, i.e. 333 gallons can be treated between regenerations.

A mild phosphoric acid-based resin cleaner can be used during the regeneration process, e.g. Res-Up liquid phosphoric acid mixture and automatic feeder system. Res-Up is less likely to damage the resin when applied according to instructions. Res-Up works in conjunction with the brine draw regeneration cycle, cleaning contaminants off the resin beads, then backwashed and rinsed to drain. Oxidants should be removed from the water prior to this system. Carbon pre-filtration for the removal of chlorine and chloramines will increase the life expectancy of the softener resin and tannin resin, as well as reduce the potential for persistent fishy odor often associated with tannin resin degradation due to chemical oxidants. Trihalomethanes (THMs) that may form from a chemical reaction between tannins and chlorine can also be removed by carbon.

⁵See Diagram

⁶Factory Program Setting