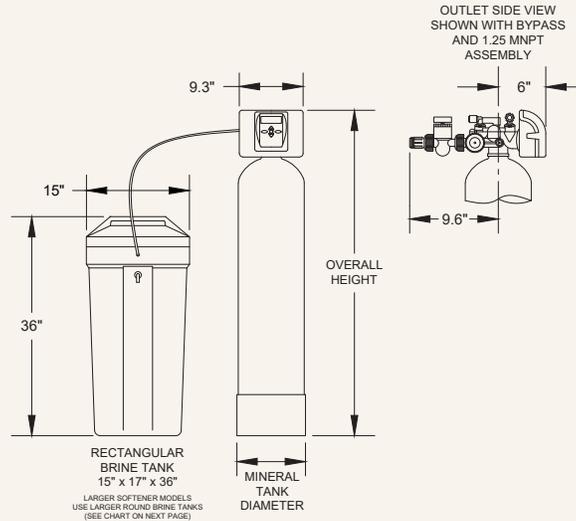




LANCASTER WATER TREATMENT

DIAMOND FESLX125 – ESTATE IRONSOF

X-FACTOR SERIES FESLX125 ESTATE IRONSOF



FESLX125 PROGRAM CYCLES ¹		WATER AVAILABLE TO SERVICE DURING REGENERATION									
		ESTATE IRONSOF									
Model Number		7-FESLX125-32B		7-FESLX125-45B		7-FESLX125-60B		7-FESLX125-90B		7-FESLX125-120B	
		Minutes	Gallons ²	Minutes	Gallons ²	Minutes	Gallons ²	Minutes	Gallons ²	Minutes	Gallons ²
1st: Fill - (Programmed in LBS salt)	Treated Water	10.00	5.00	15.00	7.50	20.00	10.00	30.00	15.00	40.00	20.00
		15.0 LBS		22.5 LBS		30.0 LBS		45.0 LBS		60.0 LBS	
2nd: Softening (Minutes)	Treated Water	240	0	240	0	240	0	240	0	240	0
3rd: Backwash (Minutes)	Untreated Water	10	10	10	13	10	13	10	32	10	53
4th: Regenerant Draw DN & Slow Rinse (Minutes)	Untreated Water	50	18.5	50	26	50	32	50	36	50	55
5th: Air Release (90 seconds)	Untreated Water	1.5	1.5	1.5	1.95	1.5	1.95	1.5	4.80	1.5	7.95
6th: Backwash (Minutes)	Untreated Water	10	10	10	13	10	13	10	32	10	53
7th: Rinse (Minutes)	Untreated Water	20	20	20	26	20	26	20	64	20	106
8th: End	-	-	-	-	-	-	-	-	-	-	-
DLFC - Drain Line Flow Control (GPM)	-	1.0		1.3		1.3		3.2		5.3	
Total Gallons to Drain ²	-	65.0		87.5		96.0		183.8		295.0	
Total Regeneration (Minutes)	-	341.5		346.5		351.5		361.5		371.5	
Total Time Untreated Water is Available to Service During Regeneration (Minutes)	-	91.5		91.5		91.5		91.5		91.5	

¹ Downflow Regenerant, Prefill Factory Program Settings

² Gallons to Drain Based on 50 PSI Inlet Pressure.



X-FACTOR SERIES FESLX125 ESTATE IRONSOFT

FESLX125 SPECIFICATIONS	ESTATE IRONSOFT				
Model Number	7-FESLX125-32B	7-FESLX125-45B	7-FESLX125-60B	7-FESLX125-90B	7-FESLX125-120B
Inlet/Outlet Fitting Options (Inches) ¹	0.75 - 1.0 - 1.25 ¹ - 1.5	0.75 - 1.0 - 1.25 ¹ - 1.5	0.75 - 1.0 - 1.25 ¹ - 1.5	0.75 - 1.0 - 1.25 ¹ - 1.5	0.75 - 1.0 - 1.25 ¹ - 1.5
Bypass Included	Yes	Yes	Yes	Yes	Yes
Drain Fit. Elb. NPT or OD Poly Tube Size (Inches)	3/4 NPT or 5/8 Tube	3/4 NPT or 5/8 Tube	3/4 NPT or 5/8 Tube	3/4 NPT or 5/8 Tube	3/4 NPT
Water Pressure Range (PSI)	20 - 100	20 - 100	20 - 100	20 - 100	20 - 100
Water Operating Temperature Range (°F)	35 - 100	35 - 100	35 - 100	35 - 100	35 - 100
Influent Maximum Water Hardness (GPG)	100	100	100	100	100
Influent Maximum Ferrous Iron (PPM) ²	10	10	10	10	10
Plug-In Power Adapter Input (VAC - Hz - A)	120V AC - 60Hz - 0.35A	120V AC - 60Hz - 0.35A	120V AC - 60Hz - 0.35A	120V AC - 60Hz - 0.35A	120V AC - 60Hz - 0.35A
Plug-In Power Adapter Output (VDC - A)	15V DC - 0.5A	15V DC - 0.5A	15V DC - 0.5A	15V DC - 0.5A	15V DC - 0.5A
Plug-In Power Adapter Cord Length	15 FT	15 FT	15 FT	15 FT	15 FT
PC Board Relay Terminal Block DC Output (V)	12V DC	12V DC	12V DC	12V DC	12V DC
3 Volt Lithium Coin Cell Battery (Type)	2032	2032	2032	2032	2032
Service Flow Rate at 15 PSI Pressure Drop (GPM) ³	22	24	25	24	25
Overall Height (Inches)	54.2	55.5	55.3	72.73	72.33
Mineral Tank Size: Diameter x Height (Inches)	10 x 47	12 x 48	13 x 48	14 x 65	16 x 65
Bottom Distributor Type	Plate	Plate	Plate	Plate	Plate
Top Basket Distributor	No	No	No	No	No
Amount of Resin (Cubic Feet)	1	1.5	2.0	3.0	4.0
#20 Flint, Medium & Fine Garnets Underbed Layer	Yes	Yes	Yes	Yes	Yes
Brine Tank Size (Inches)	15 x 17 x 36 ⁴ (Salt Grid)	15 x 17 x 36 ⁴ (Salt Grid)	18 D x 40 H (Salt Grid)	24 D x 50 H	24 D x 50 H
Brine Tank Capacity (LBS Salt)	275	275	400	900	900
Drain Line Flow Control (GPM)	1.0	1.3	1.3	3.2	5.3
Brine Line (Re-Fill) Flow Control (GPM)	0.5	0.5	0.5	0.5	0.5
Injector (Color)	IE - White	IF - Blue	IG - Yellow	IH - Green	II - Orange
Grains Capacity (Grains @ LBS Salt) ⁵	32,000 @ 15.0	48,000 @ 22.5	64,000 @ 30.0	96,000 @ 45.0	128,000 @ 60
Water to Drain at 50 PSI Inlet Pressure (Gallons)	65.0	87.5	96.0	183.8	295.0

¹1.25 MNPT Standard - Options Available

²Ferrous iron ("clear-water iron"): Water comes out of the faucet clear, but turns red or brown after standing. Frequent regeneration required - Day Override factory set for 4 days between regenerations. Influent water to be treated should contain at least 1 gpg (2 gpg recommended) of hardness for each ppm or mg/L of ferrous iron, with a minimum of 3 gpg of hardness.

Example 1: For 1 ppm ferrous iron, water hardness should not be less than 3 gpg.

Example 2: For 4 ppm ferrous iron, water hardness should not be less than 4 gpg (8 gpg recommended).

This allows hardness dispersion with the iron on the exhausted resin, helping facilitate the removal of iron from the resin bed during regeneration. The Fine Mesh Resin bead size provides improved kinetics where extra surface area and a short diffusion path are needed for iron removal. Ferrous iron readily converts to ferric iron in the presence of oxygen, chlorine, or other oxidants. Ferric iron is insoluble and should be removed by filtration. Even if the influent has very low oxygen (which is very likely for the iron to remain in the ferrous state), the brine tank is never sealed therefore the brine used to regenerate contains oxygen. Ferrous iron precipitates right at the surface of the resin beads, potentially plugging up the resin bead pores, coating the beads and plugging up the flow spaces between the beads. Resin cleaner added to the brine solution is recommended for cleaning the softener resin bed.

³Flow rates in the table may exceed resin manufacturer's recommended maximum flow rates. Selecting a system flow rate by pressure drop alone does not guarantee that the system will provide softened water.

⁴See Diagram

⁵Factory Program Setting