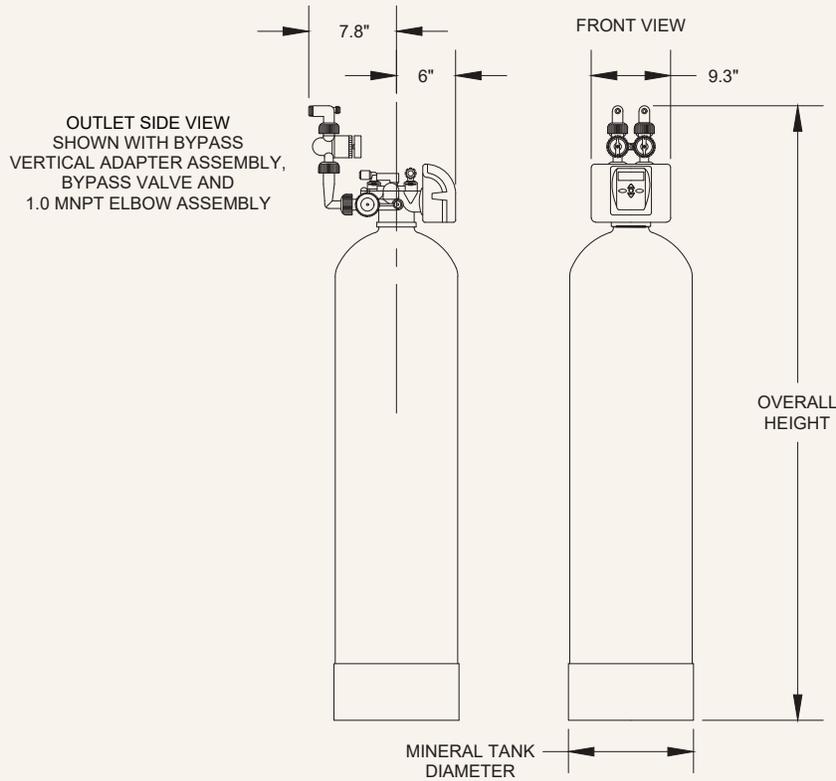




# LANCASTER

## WATER TREATMENT

### X-FACTOR SERIES LXCTAIR AQUANUE FILTERS



DIAMOND LINE LXCTAIR - AQUANUE AERATION FILTERS

LXCTAIR PROGRAM CYCLES*		AQUANUE (CATALYTIC CARBON) AERATION FILTER					
Model Number	7-LXCTAIR-1B		7-LXCTAIR-2B		7-LXCTAIR-3B		
	Time	Gallons	Time	Gallons	Time	Gallons	
Units:							
1st Cycle: Air Release	1 sec	0	1 sec	0	1 sec	0	
2nd Cycle: Filtering	1 min	0	1 min	0	1 min	0	
3rd Cycle: Air Release	1 sec	0	1 sec	0	1 sec	0	
4th Cycle: Filtering	1 min	0	1 min	0	1 min	0	
5th Cycle: Air Release	1 sec	0	1 sec	0	1 sec	0	
6th Cycle: Filtering	1 min	0	1 min	0	1 min	0	
7th Cycle: Backwash	10 min	53	10 min	100	10 min	150	
8th Cycle: Regenerant Draw Down	13 min	23.4	18 min	32.4	30 min	54	
9th Cycle: End	-	-	-	-	-	-	
Total Gallons to Drain**	76.4		132.4		204		
Total Regeneration Time	≈ 26 min		≈ 31 min		≈ 43 min		
Days Between Backwash***	1		1		1		

\*Factory Program Settings for models with serial numbers ending with the number 1.

\*\*Based on 50 PSI Inlet Pressure

\*\*\*Factory Program Setting. Days between backwash can be field adjusted based on local conditions. Refer to manual. Backwashing every day is strongly recommended to replace the head of air. Less frequent backwashing should only be considered for application where iron is the only contaminant: 0.3 - 2.0 ppm iron, every 3rd day max.



# X-FACTOR SERIES LXCTAIR AQUANUE FILTERS

LXCTAIR SPECIFICATIONS*			AQUANUE (CATALYTIC CARBON) AERATION FILTER		
Model Number			7-LXCTAIR-1B	7-LXCTAIR-2B	7-LXCTAIR-3B
Inlet/Outlet Fitting Options (Inches) <sup>1</sup>			0.75 - 1.0 <sup>1</sup> - 1.25 - 1.5	0.75 - 1.0 <sup>1</sup> - 1.25 - 1.5	0.75 - 1.0 <sup>1</sup> - 1.25 - 1.5
Bypass Included			Yes	Yes	Yes
Drain Fitting Elbow NPT (Inches)			3/4 NPT	1" NPT Straight Fitting	1" NPT Straight Fitting
Water Pressure Range (PSI)			20 - 100	20 - 100	20 - 100
Water Operating Temperature Range (°F)			35 - 100	35 - 100	35 - 100
Plug-In Power Adapter Input (VAC - Hz - A)			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
Plug-In Power Adapter Cord Length (FT)			15 FT	15 FT	15 FT
PC Board Relay Terminal Block DC Output (V)			12V DC	12V DC	12V DC
3 Volt Lithium Coin Cell Battery (Type)			2032	2032	2032
Amount of Catalytic Carbon (Cubic Feet) <sup>2</sup>			1	2	3
Service Flow Rates (GPM) <sup>3</sup>	Recommended	Organics	1	2	3
	Typical	Chloramine	1.87	3.74	5.61
		Continuous	2.7	5.4	7.0
		Intermittent (Peak)	5.5	10.7	14.0
Overall Height (Inches)			66.4	77.73	77.33
Mineral Tank Size: Diameter x Height (Inches)			10 x 54	14 x 65	16 x 65
Bottom Distributor Type			Plate	Plate	Plate
Top Basket Distributor			No	No	No
Air Blocker			Yes	Yes	Yes
Underbed Layer			No	No	No
Drain Line Flow Control (GPM)			5.3	10	15
Injector (Color)			IK - Light Green	IK - Light Green	IK - Light Green
Water to Drain (Gallons)			76	132	204

\*Specifications for models with serial numbers ending with the number 1.

<sup>1</sup>1.0 MNPT Elbow Standard - Options Available

<sup>2</sup>Mineral used: Catalytic-High Activated Carbon (CAT-HAC). Used for removal of chlorine, chloramine, color, taste, odor and low levels of sulfur, etc. The catalytic activity of Catalytic Carbon makes it highly effective for the reduction of chloramines and hydrogen sulfide from potable water. To insure effective removal of hydrogen sulfide and iron, 4 ppm (mg/L) dissolved oxygen content is required. Catalytic Carbon's large micropore volume is well suited for removal of low molecular weight organic compounds and their chlorinated by-products such as chloroform and other trihalomethanes (THMs). Upon installation allow bed to soak overnight before backwashing. The mineral bed should be backwashed periodically to eliminate accumulated suspended matter and re-grade the bed. Catalytic Carbon has an extremely high capacity but must be replaced when the filter bed loses the capacity for reduction of chloramines and hydrogen sulfide.

**Influent Limitations and Operating Parameters:**

Hydrogen sulfide up to 5 ppm.

Iron up to 2 ppm.

Effective with pH as low as 5.8. Removing Iron - recommend pH 7.0 or higher but below 8.5.

Well pump capacity must be equal to or greater than the required backwash flow rate to assure proper backwash.

If the well pump cannot provide the required backwash flow rate, consider two smaller filters, parallel installation with offset backwash times.

**<sup>3</sup>Basis for Service Flow Rates:**

Continuous - 5 GPM/SQ. FT.

Intermittent (Peak) - 10 GPM/SQ. FT.

Organics: 1 GPM/CU. FT.

Higher flow rates are possible, however lower flow rates produce higher quality water.

Empty Bed Contact Time for Chloramine Removal using Catalytic Carbon ... at least 4 minutes.

Service Flow Rate (GPM) =  $\frac{\text{Bed Volume (CU. FT.)} \times 7.481 \text{ Gallons/CU. FT.}}{\text{Empty Bed Contact Time in Minutes}}$

Empty Bed Contact Time in Minutes