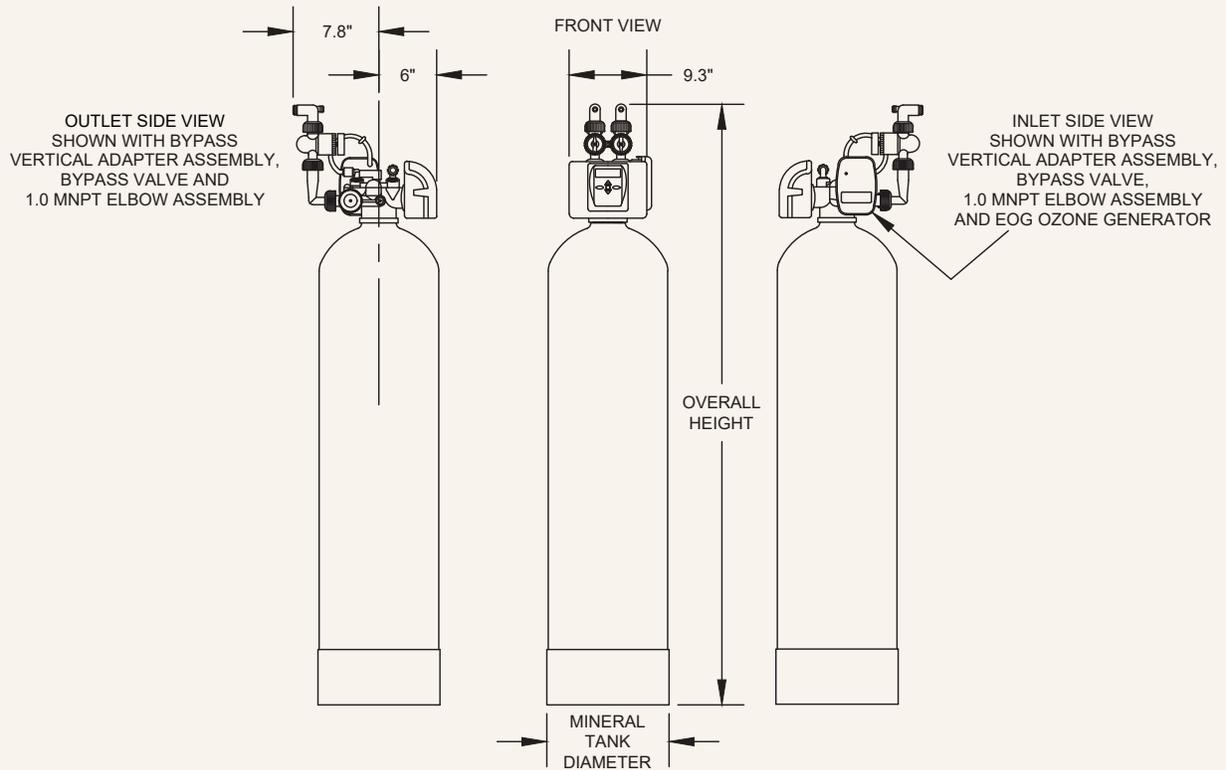




# LANCASTER

## WATER TREATMENT

### X-FACTOR SERIES L XKATAIRO3 AQUANUE FILTERS



DIAMOND LINE L XKATAIRO3 - AQUANUE ENHANCED OXIDATION FILTERS

L XKATAIRO3 PROGRAM CYCLES*		AQUANUE (KATALOX LIGHT) ENHANCED OXIDATION FILTER		
Model Number	7-L XKATAIRO3-1B		7-L XKATAIRO3-2B	
Units:	Time	Gallons	Time	Gallons
1st Cycle: Air Release	1 sec	0	1 sec	0
2nd Cycle: Filtering	1 min	0	1 min	0
3rd Cycle: Air Release	1 sec	0	1 sec	0
4th Cycle: Filtering	1 min	0	1 min	0
5th Cycle: Air Release	1 sec	0	1 sec	0
6th Cycle: Filtering	1 min	0	1 min	0
7th Cycle: Backwash	10 min	53	10 min	100
8th Cycle: Regenerant Draw Down	14 min	25.2	19 min	34.2
9th Cycle: End	-	-	-	-
<b>Total Gallons to Drain**</b>	78.2		134.2	
<b>Total Regeneration Time</b>	≈ 27 min		≈ 32 min	
<b>Days Between Backwash***</b>	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 ozone. Less frequent backwashing should only be considered for application where iron is the only contaminant: 0.3 - 2.0 ppm iron, every 3rd day. 2.0 - 4.0 ppm iron, every other day.



# X-FACTOR SERIES L XKATAIRO3 AQUANUE FILTERS

L XKATAIR SPECIFICATIONS*		AQUANUE (KATALOX LIGHT) ENHANCED OXIDATION FILTER	
Model Number		7-L XKATAIRO3-1B	7-L XKATAIRO3-2B
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
Bypass Included		Yes	Yes
Drain Fitting Elbow NPT (Inches)		3/4 NPT	1" NPT Straight Fitting
Water Pressure Range (PSI)		20 - 100	20 - 100
Water Operating Temperature Range (°F)		35 - 100	35 - 100
EOG-I Plug-In Power Adapter <sup>2</sup> Input (VAC - Hz - A)		120V AC - 60Hz - 0.8A Max	120V AC - 60Hz - 0.8A Max
EOG-I Plug-In Power Adapter <sup>2</sup> Output (VDC - A)		14.0V DC - 2.14A	14.0V DC - 2.14A
EOG-I Plug-In Power Adapter <sup>2</sup> Cord Length (FT)		9 FT	9 FT
PC Board Relay Terminal Block DC Output (V)		12V DC	12V DC
3 Volt Lithium Coin Cell Battery (Type)		2032	2032
Amount of Katalox Light (Cubic Feet) <sup>3</sup>		1	2
Service Flow Rates (GPM) <sup>4</sup>	Continuous	1.9 to 2.7	3.7 to 5.4
	Intermittent (Peak)	3.5 to 4.6	7.0 to 9.1
Overall Height (Inches)		66.4	77.73
Mineral Tank Size: Diameter x Height (Inches)		10 x 54	14 x 65
Bottom Distributor Type		Plate	Plate
Top Basket Distributor		No	No
Air Blocker		Yes	Yes
Underbed Layer		No	No
Drain Line Flow Control (GPM)		5.3	10
Injector (Color)		1K - Light Green	1K - Light Green
EOG-I - Enhanced Oxidation (Ozone) Generator Included <sup>2</sup>		Yes	Yes
Water to Drain (Gallons)		78	134

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

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

<sup>2</sup>The EOG-1 "One Plug" design power adapter supplies power to ozone generator (EOG-1) and the filter control valve.

<sup>3</sup>Mineral used: Katalox Light. Lightweight mineral bed provides savings on required daily backwash water. The Enhanced Oxidation Generator (EOG) creates a controlled amount of ozone in the filter, increasing the oxidation process while providing anti-microbial protection against "nuisance" bacteria slime build-up within the filter tank and the odors related to the build-up. Nuisance bacteria refers to iron and sulfate reducing bacteria which is harmless to human health. Ozonation ensures sufficient ozone (O<sub>3</sub>) for this highly concentrated catalytic coated granular filter media to effectively filter high levels of iron, up to 1 ppm of manganese and stronger hydrogen sulfide "rotten egg" odor. The mineral bed should be backwashed frequently to eliminate accumulated suspended matter and re-grade the bed.

#### Influent Limitations and Operating Parameters:

Influent water pH can be as low as 5.8 but for best results recommend pH 7.5 or higher but below pH 8.5 for removing iron.

Hydrogen Sulfide up to 5 ppm.

Iron up to 6 ppm.

Manganese up to 1 ppm. For manganese, recommend pH 8.5 but below 8.5 if iron is present. Manganese over 1.0 ppm may gradually prevent iron removal and with the presence of ozone may create permanganate.

Do NOT install on chlorinated water supplies - harmful by-products may be formed with ozone.

Do NOT install on water supplies containing organic matter (Tannins); the presence of organic matter such as Tannins can inhibit the oxidation process of iron and manganese.

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.

#### Instruction for first time installation (start up only) to prevent pH increment:

Do NOT soak the Katalox Light media bed. Backwash the media bed at least 60 minutes. Refer to installation manual.

#### \*Basis for Service Flow Rates:

Continuous - 3.5 to 5.0 GPM/SQ. FT.

Intermittent (Peak) - 6.5 to 8.5 GPM/SQ. FT.

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