



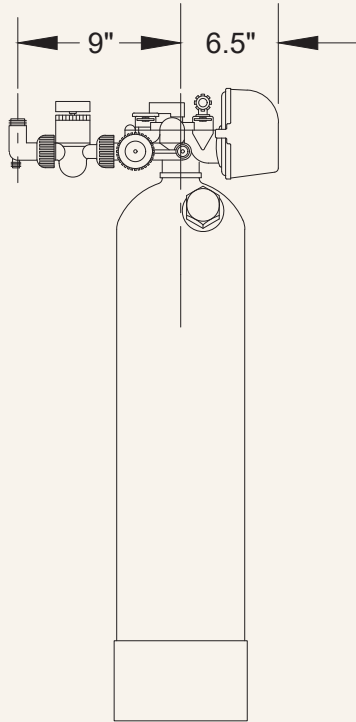
# LANCASTER

## WATER TREATMENT

BRONZE LINE LETDANSM - SUPER MIX ACID NEUTRALIZERS

### X-FACTOR SERIES LETDANSM SUPER MIX ACID NEUT

OUTLET SIDE VIEW  
SHOWN WITH BYPASS AND  
1.0 MNPT ELBOW ASSEMBLY  
AND TANK DOME PLUG



FRONT VIEW



#### LETDANSM FIXED CYCLES OF OPERATION

#### ACID NEUTRALIZER (SUPER MIX) FILTER

Model Number	7-LETDANSM-1B		7-LETDANSM-1.5B		7-LETDANSM-2B		7-LETDANSM-3B	
	P7		P8		P8		P9	
Program	P7		P8		P8		P9	
Units:	Minutes	Gallons	Minutes	Gallons	Minutes	Gallons	Minutes	Gallons
1st Cycle: Backwash (C1)	6	39	10	65	10	100	14	140
2nd Cycle: Rinse (C4)	4	26	6	39	6	60	8	80
Total Gallons to Drain	65		104		160		220	
Total Minutes	10		16		16		22	
Days Between Backwash*	7		7		7		7	

\*Factory Program Setting. Days between backwash can be field adjusted based on local conditions. Refer to manual.

# X-FACTOR SERIES LETDANSM SUPER MIX ACID NEUT

LETDANSM SPECIFICATIONS		ACID NEUTRALIZER (SUPER MIX) FILTER			
Model Number		7-LETDANSM-1B	7-LETDANSM-1.5B	7-LETDANSM-2B	7-LETDANSM-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	0.75 - 1.0 <sup>1</sup> - 1.25 - 1.5
Bypass Included		Yes	Yes	Yes	Yes
Drain Fitting Elbow NPT (Inches)		3/4 NPT	3/4 NPT	3/4 NPT	3/4 NPT
Water Pressure Range (PSI)		20 - 100	20 - 100	20 - 100	20 - 100
Water Operating Temperature Range (°F)		35 - 100	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	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
Plug-In Power Adapter Cord Length (FT)		15 FT	15 FT	15 FT	15 FT
3 Volt Lithium Coin Cell Battery (Type)		2032	2032	2032	2032
Amount of Super Mix (Cubic Feet) <sup>2</sup>		1	1.5	2	3
Service Flow Rates (GPM) <sup>3</sup>	Continuous	2.7	2.7	4.6	4.6
	Intermittent (Peak)	5.5	5.5	9.2	9.2
Overall Height (Inches)		54.5	61.7	62.3	72.4
Mineral Tank Size: Diameter x Height (Inches)		10 x 47	10 x 54	13 x 54	13 x 65
Mineral Tank Dome Plug and O-Ring		Yes	Yes	Yes	Yes
Bottom Distributor Type		Stack - II Segment	Stack - II Segment	Stack - II Segment	Stack - II Segment
Top Basket Distributor		No	No	No	No
Support Bedding		Yes	Yes	Yes	Yes
Drain Line Flow Control (GPM)		6.5	6.5	10	10
Water to Drain (Gallons)		65	104	160	220

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

<sup>2</sup>Mineral used: Super Mix (80% Calcite / 20% Corosex):

**Calcite** (16 x 40 mesh size) is a crushed and screened grey-white marble media which can inexpensively be used to neutralize acidic or low pH waters to a neutral, less corrosive effluent. Calcite is a naturally occurring calcium carbonate media. One of the advantages of Calcite is its self-limiting property. When properly applied, it corrects pH only enough to reach a non-corrosive equilibrium. It does not overcorrect under normal conditions. Upon contact with Calcite, acidic waters slowly dissolve the calcium carbonate to raise the pH which reduces the potential leaching of copper, lead and other metals found in typical plumbing systems. Periodic backwashing will prevent packing, reclassify the bed and maintain high service rates. Depending on pH, water chemistry and service flow, the Calcite bed will have to be periodically replenished as the Calcite is depleted. As the Calcite's calcium carbonate neutralizes the water, it will increase hardness and a softener may become necessary after the neutralizing filter.

**Corosex** is a specially processed hard, bead-like brownish-white magnesia, adapted for use in filters to neutralize acidity by increasing the pH value. Corosex, being a highly reactive magnesium oxide, is used most effectively where pH correction is substantial or high flow conditions are in use. pH correction and media consumption are affected by a number of water chemical variables. Under certain low flow conditions, Corosex may overcorrect and create a highly basic (high pH) condition. Under certain hardness conditions, pH correction can cause hardness minerals to precipitate out of solution, resulting in cementing or solidification of the Corosex mineral bed. As Corosex's magnesium oxide neutralizes the water, it will increase hardness and a softener may become necessary after the neutralizing filter.

**Super Mix** (80% Calcite / 20% Corosex) effectively combines the high flow neutralization properties of Corosex, along with the slower reacting low flow properties of Calcite, increasing the ability to correct low pH and reducing potentially high basic properties due to overcorrection. Super Mix does not require chemicals for regeneration, only periodic backwashing is required. The mineral bed should be backwashed periodically to eliminate accumulated suspended matter and re-grade the bed. Being soluble to acidity, Super Mix will slowly dissolve and will need to be replenished periodically.

**Influent Limitations and Operating Parameters:**

Calcite will neutralize acidic water pH as low as 6.0.

For pH range of 5.5 to 5.9, Super Mix (80% Calcite & 20% Corosex) is recommended.

For pH below 5.5, consult factory.

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

Continuous - 5 GPM/SQ. FT.

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

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