



*“Designed, Tested and Approved for Shipment
by LWT Engineering Staff”*

WATER FILTRATION EQUIPMENT

LWF Series Commercial Water Filters

7 TO 69 GPM and Larger



(Single, Twin, Triple or Quadruple systems)

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LWF SERIES filtration equipment can be engineered to solve complex commercial and industrial water treatment problems. Multiple tank systems can include an optional pressure differential switch to trigger a regeneration on multi-media applications.



The Pentair 3214 NXT Microprocessor provides single, twin, triple or quadruple capabilities. The controller features twin alternating, progressive demand or parallel application options. Multiple tank applications with sequential regeneration and user friendly programming are the premiere features of this controller. Five programmable cycle adjustments are standard for those problem water applications.



Pressure Differential Switches are a frequently requested design for the multi-media systems removing turbidity and suspended particles down to a nominal 10 microns. This feature has a differential pressure switch with two connections, one located on the inlet pipe and one on the outlet pipe. When a 10 lb. differential (adjustable) in operating pressure occurs, the pressure switch sends a signal to the controller for immediate regeneration to clean the media bed. The correct backwash duration is critical to prevent premature bed failure. This can be accomplished by observing the backwash water at the end of the cycle and verifying the water is clear, ensuring a clean media bed for peak performance.



Fiberglass Pressure Vessels have standard working pressure of 150PSI. Industrial grade composite fiberglass construction provides outstanding durability and higher corrosion resistance than carbon steel vessels (Chemical resistant Vinylester lining is available). Fiberglass vessel weights are about 1/3 less than steel tank vessels. Non-code vessels and ASME vessels are available.

Carbon Filtration - Chlorine, Chloramine and Dissolved Organic reduction is accomplished by using a carbon media matched to your application. Contact time and bed depth are very critical in the adsorption process and has a direct impact on the effectiveness of the equipment. To achieve the proper contact time, correct equipment sizing and an outlet flow control is critical. The water supply should be tested with a complete water analysis for proper application and engineering. *Elevated concentrations of oil, turbidity or iron can foul and prevent optimal performance of the equipment. Pre-treatment equipment would be a recommended solution.



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Greensand Filtration - Iron, Manganese and Hydrogen Sulfide problems require the pH between the 6.8 - 8.0 range. The manganese greensand media has an oxide coating that oxidizes the iron, manganese, hydrogen sulfide and precipitates on contact. The precipitates, down to 30 microns, are then filtered by the media bed and expelled during the regeneration process. The media can be regenerated using a continuous feed of chlorine or potassium permanganate. A batch regeneration system is available as an option. The correct backwash duration and GPM is critical to prevent premature bed failure.

Multi-Media Filtration – Provides filtration down to a nominal 10 microns utilizing quartz sand, garnet and anthracite combinations designed to increase service flow rates per square foot of bed area, compared to sand filtration systems. Re-stratification of the media layer automatically occurs and is based on their density and particle size, which reduces rinse time and water costs.

Operating Specifications: Pressure 30-100PSI Temperature range 35F-110F Electrical - 120vac, 60Hz **Drain piping:** Max 10ft. vertical and discharged to an atmospheric floor drain sized to handle the backwash rate of the system (Max proven length is 25ft).

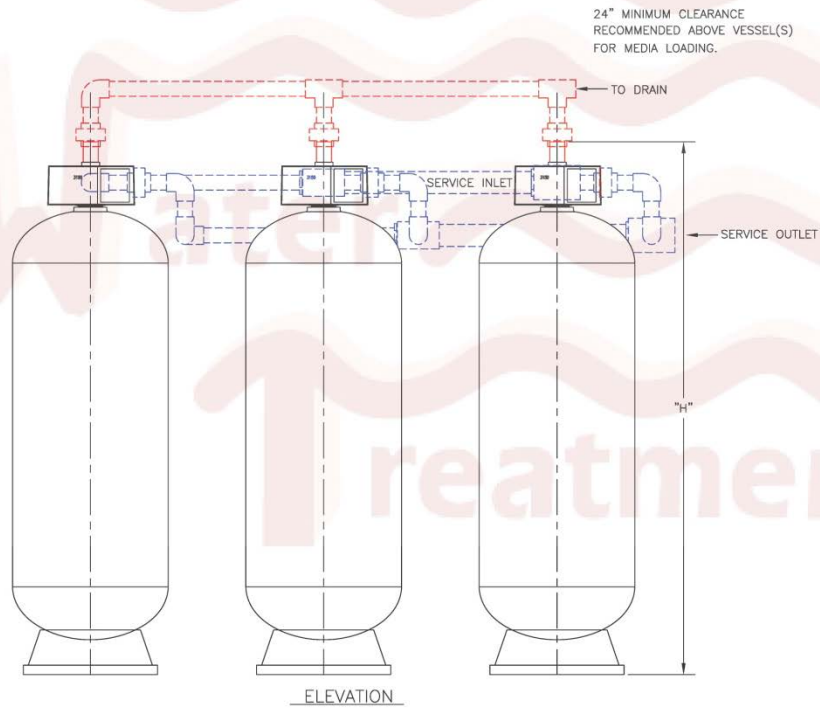
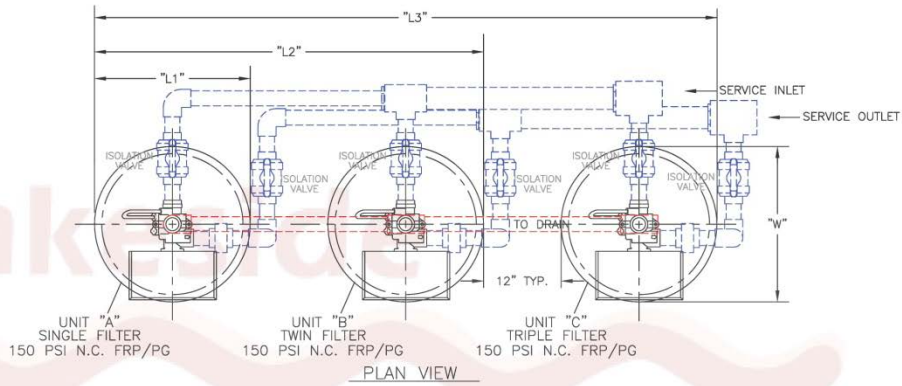


Operating Guidelines: Typically lower flow rates produce higher quality water with longer service run.

OPTIONS AVAILABLE:

- Skid mounted, pre-piped, pre-wired for faster and cost effective installations
- Separate source back wash - allows cleaner water to be used for regeneration
- Service backwash pumps – increases flow and pressure to provide correct backwash rates.
- No By-Pass Piston – eliminates unfiltered water to service during regeneration cycles.
- Cam & Switch Kit – dry contacts to control auxiliary equipment and will provide interlock between multiple tanks preventing simultaneous regeneration.
- ASME code vessels stamped and certified
- Chemical injection (pre-treatment)
- Custom engineered systems

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Filter System Dimensions

MODEL NO.	MEDIA TANK	OAH	WIDTH	Overall Length		
				SINGLE	TWIN	TRIPLE
LWF-X-14	14" X 65"	78	15	15	42	69
LWF-X-16	16" X 65"	79	17	17	46	75
LWF -X-21	21" X 62"	102	22	22	56	90
LWF -X-24	24" X 72"	85	25	25	62	99
LWF-X-30	30" X 72"	93	31	31	74	117



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LWF Filter Specifications - Multi-Media 10 Micron Rating

MODEL	MINERAL TANK SIZE	IN/OUT PIPE SIZE	DRAIN PIPE	SERVICE GPM	PSI-D	PEAK	PSI-D	BWF RATE	MINERAL
Multi-Media	(Dia. & Height)	(inches)	IN /OUT (inches)			GPM		GPM	QTY. CU.FT.
LWF-ML-14	14 X 65	1	1	10	7	15	14	15	3
LWF-ML-16	16 X 65	1-1/2	1	15	8	20	12	20	4
LWF-ML-21	21 X 62	1-1/2	1-1/2	20	5	30	10	35	7
LWF-ML-24	24 X 72	2	2	30	10	50	24	50	10
LWF-ML-30	30 X 72	2	2	48	16	69	25	70	14

LWF Filter Specifications - Manganese Greensand 30 Micron Rating

MODEL	MINERAL TANK SIZE	IN/OUT PIPE SIZE	DRAIN PIPE	SERVICE GPM	PSI-D	PEAK	PSI-D	BWF RATE	MINERAL
Manganese Greensand	(Dia. & Height)	(inches)	IN /OUT (inches)			GPM		GPM	QTY. CU.FT.
LWS-MG-14	14 X 65	1	1	5	3	7	6	10	3
LWF-MG-16	16 X 65	1 ½	1	7	3	9	5	15	4
LWF-MG-21	21 X 62	1 ½	1-1/2	9	5	13	7	25	8
LWF-MG-24	24 X 72	1 ½	1-1/2	14	8	20	11	35	9
LWF-MG-30	30 X 72	2	2	22	5	31	9	55	14

LWF Filter Carbon Specifications

MODEL	MINERAL TANK SIZE	IN/OUT PIPE SIZE	BACKWASH PIPE	SERVICE GPM	PSI-D	PEAK	PSI-D	BWF RATE	MINERAL
Carbon	(Dia. & Height)	(inches)	IN /OUT (inches)			GPM		GPM	QTY. CU.FT.
LWF-AC-14	14 X 65	1	1	6	3	12	9	10	3
LWF-AC-16	16 X 65	1 ½	1	8	3	16	11	15	4
LWF-AC-21	21 X 62	1 ½	1-1/2	11	4	22	14	25	7
LWF-AC-24	24 X 72	1 ½	1-1/2	15	6	30	11	30	10
LWF-AC-30	30 X 72	2	2	27	7	54	12	50	15