

Engineering Specification

Job Name _____
 Job Location _____
 Engineer _____
 Approval _____

Contractor _____
 Approval _____
 Contractor's P.O. No. _____
 Representative _____

Series FL Commercial Filox® Filter Systems

Connection Sizes: 1½" to 3" (38 - 80 mm)

Flow Rates: Up to 60 gpm (227 lpm)

Watts Series FL Filox® filters are time tested, highly effective backwashing media filtration systems for the removal of iron, manganese and hydrogen sulfide from water.

Regeneration is meter demand initiated. All cycles of regeneration are fully automatic and do not require manual actuation.

These systems are designed for commercial applications with flow rates up to 60 gpm with media bed sizes ranging from 2 to 10 cubic feet in size. If higher flow rates are required, multiple units can be installed in parallel. The media bed is cleaned of captured sediment by periodic backwashing and flushing. This cleaning cycle is time clock demand initiated and can be programmed to occur at any time that is convenient for the user. All steps of the cleaning cycle as well as returning to service are fully automatic and do not require manual actuation.

Filox® media filter systems are a unique, chemical free, approach to reducing red staining iron, rotten egg smelling hydrogen sulfide, and black staining manganese in your water. These systems utilize the natural dissolved oxygen (DO) in the water as oxidation agents. Additional oxidizers such as chlorine can also be introduced when DO is lacking. Together the oxidants and contaminants are introduced onto the surface of our catalytic filtration media. The media catalyzes the oxidation of the contaminants and then traps the impurities. Our Filox® media is an advanced form of manganese dioxide (MD). Virtually all iron, hydrogen sulfide, and manganese removal medias have some percentage of MD. At 80% or greater, Filox boasts the highest percentage of MD and the highest flow rates per cubic foot of all of the iron removal medias on the market today



Features

- Durable brass bodied control valve for years of service
- Fully automatic time clock initiated control valve
- Filox® has highest flow rate of any iron removal media
- Fully adjustable backwash and flush cycles
- Dry contact lock out switch for remote interface is standard
- Highly corrosion resistant fiberglass tanks
- Durable polypropylene lower distribution system

⚠ WARNING

Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

NOTICE

The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product.

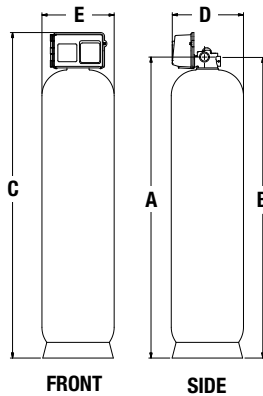
Specification

A Watts Series FL Filox® filter system shall be installed on the building's main water line just after it enters the building. The installation point shall be after any backflow prevention or pressure regulating valves. Other installation options are to install a system just before the plumbing equipment or processes requiring filtered water. In installations where the dedicated cold water make up to a water heater is the installation point, a backflow preventer and a thermal expansion tank must be installed as well. The system shall be installed with a bypass valve to allow for the shut down and removal of the unit without interrupting the water supply to the building.

The filter system shall be a backwashing granular media bed type with digital programmable time clock initiated backwash and high capacity manganese dioxide coated filter media. The filtration media shall be rated at 12 x 40 mesh size. The system shall include all components necessary for proper operation. Electrical requirements are 100-240 VAC, 50/60 Hz. A local drain is required to accept drain water from the system.

Dimensions & Weights

1½" Models



Call customer service if you need assistance with technical details.

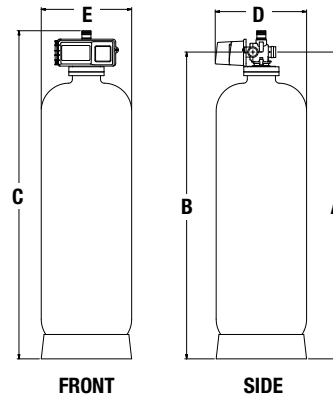
MODEL NO.	DIMENSIONS										SHIPPING WEIGHT	
	A		B		C		D		E		lb	kg
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm		
NF16T2850NT	67½	1711	68½	1730	73½	1870	16¼	425	16¼	425	750	341
NF21-2850NT	68½	1749	69¾	1772	75¼	1911	22¼	565	22¼	565	1250	568

Feed Water Guidelines*

pH	6.56 to 9
Water Pressure	30 psi to 125 psi (205 kPa to 8.5 bar)
Water Temperature	34 - 110°F (1 - 43°C)
H2S	Up to 3 ppm
Iron	Up to 10 ppm
Manganese	Up to 5 ppm

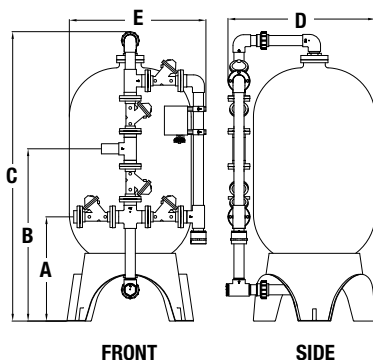
*For all other guideline information please contact your Watts representative.

2" Models



MODEL NO.	DIMENSIONS										SHIPPING WEIGHT	
	A		B		C		D		E			
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lb	kg
NF21T3150NT	72¼	1835	72¼	1835	75½	1921	22¼	565	22¼	565	1500	682
NF24-3150NT	82	2083	82	2083	85½	2169	24¼	616	24¼	616	2000	909
NF24T3150NT	82	2083	82	2083	85½	2169	24¼	616	24¼	616	2000	909
NF30-3150NT	85	2159	85	2159	88½	2245	29¼	756	29¼	756	3000	1364

3" Models



MODEL NO.	DIMENSIONS										SHIPPING WEIGHT	
	A		B		C		D		E		lb	kg
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm		
NF42-DVN	28½	724	57¼	1454	102½	2594	64¼	1645	60½	1537	5500	2500
NF48-DVN	25¼	641	53¾	1356	99½	2518	66½	1692	59	1499	7500	3409

Specifications

MODEL NO.	TANK SIZE	MINERAL TANK		FLOW RATES FOR SERVICE AND BACKWASH	
		TANK SIZE FT ²	FILOX® FT ³	SERVICE GPM MAX	BACKWASH GPM 19 GPM FT ²
NF16T2850NT	16" X 65"	1.40	4	24	27
NF21-2850NT	21" X 62"	2.40	7	42	46
NF21T3150NT	21" X 62"	2.40	7	42	46
NF24-3150NT	24" X 72"	3.14	10	60	60
NF24T3150NT	24" X 72"	3.14	10	60	60
NF30-3150NT	30" X 72"	4.90	15	90	93
NF42-DVN	42" X 72"	9.62	30	180	183
NF48-DVN	48" X 72"	12.57	40	240	239

Ordering Information

MODEL NO.	ORDERING CODES	DESCRIPTION	PIPE SIZE	SPACE REQUIRED W X D X H	WEIGHT	
					lb	kg
NF16T2850NT	68110439	4 cubic foot Filox filter with auto backwash	1.5"	17" X 17" X 86"	750	341
NF21-2850NT	68105917	7 cubic foot Filox filter with auto backwash	1.5"	23" X 23" X 88"	1250	455
NF21T3150NT	68110619	7 cubic foot Filox filter with auto backwash	2.0"	23" X 23" X 88"	1500	682
NF24-3150NT	68105918	10 cubic foot Filox filter with auto backwash	2.0"	25" X 25" X 98"	2000	909
NF24T3150NT	68110170	10 cubic foot Filox filter with auto backwash	2.0"	25" X 25" X 98"	2000	909
NF30-3150NT	68105919	15 cubic foot Filox filter with auto backwash	2.0"	30" X 30" X 101"	3000	1364
NF42-DVN	68105921	30 cubic foot Filox filter with auto backwash	3.0"	61" X 65" X 115"	5500	2500
NF48-DVN	68105922	40 cubic foot Filox filter with auto backwash	3.0"	59" X 67" X 112"	7500	3409

NOTICE

Flow rates, dimensions, and capacities are per tank. Pipe size, tank size, and space requirements are in inches. Backwash flow rate may vary depending on temperature changes or specific bed expansion requirements.

NOTICE

The use of additional oxidizing agents (oxygen, chlorine, ozone, hydrogen peroxide, potassium permanganate, etc) is recommended. Oxidizers will enhance the performance of Filox™. They oxidize the media, which enables Filox™ to perform quicker and keep cleaner. It is always a safe practice to install an oxidation method upstream (in front) of the Filox™ bed. Do not exceed 4 ppm free chlorine in the feed water stream or bed damage may occur.

