

# Commercial Media Filters

FRP Tanks: 7" to 42" Diameter

**MF-400**  
**SERIES**

Pure Aqua's pressure filters clarify water by removing sediment, turbidity, iron, unpleasant tastes, odors, suspended particles, and unwanted color, all of which are commonly found in surface water. They can be used in a variety of services including: industrial, municipal, and institutional applications.

## Standard Features

- High performance FRP tank
- 115V/1ph/60Hz power supply
- Automatic backwash valve
- Top mounted Fleck valve
- Time controller for scheduled backwash cycle
- Flow controller to limit backwash flow
- All internals are plastic materials

## Available Options

- Duplex systems
- Tanks according to ASME code for 18" and larger
- Stainless steel tanks
- Epoxy coated steel tanks
- 240V/1ph/50Hz power supply
- Vacuum breaker
- Pressure relief valve
- Inlet/outlet sample valves
- Inlet/outlet pressure gauges
- Differential pressure switch and gauge
- Filters using diaphragm valves
- Auxiliary switch for backwash pump start

## Operation Specifications

- Operating pressure: 25-100 psi (1.73-6.9 bar)
- Electrical supply: 115V/1ph/60Hz
- Operating temperature: 41-110°F (5-43°C)

## Media Filtration Operating Cycles

### Service Cycle

Water flows downward through the media while solids accumulate in the media bed. The purified water passes through to downstream processes.

### Backwash Cycle

When the filter begins to clog or when the head loss (pressure drop) through the bed increases, flow rates are reduced. To prevent degradation of water quality, the flow is reversed. This is directed by the control valve(s) to drain, carrying with it, the particulate matter that has built up during service. The required flow is specific to the media and is essential to proper cleaning of the media bed. For media filters, the backwash flow is always higher than the service flow rate.



FLECK 3150



FLECK 2850



FLECK 5800



70F1220MM

31F36210MM



28F2175MM  
and 28F2175AC on a skid

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## Pressure Gauges

Pre and post filter pressure gauges are important to monitor the filter pressure and determine the backwash frequency



## DP Switch

The differential pressure gauge and switch are used to automatically initiate backwash based on the differential pressure.



## Auxiliary Switch

Auxiliary switches are used to provide a signal to start a backwash pump or to provide a status signal to a BMS system or interlock with an RO system.

## Filter Media Types

Pure Aqua supplies a wide range of quality filter media that meet industry standards for efficient and effective filtration.



Coarse Gravel

Fine Gravel

Coconut Carbon Media

Silica Sand

Anthracite Media

## Sand

Graded in various ranges, Pure Aqua's sand can be used as filtration media or underbedding depending on particle size and application.

## Calcite

Calcite media is specially graded calcium carbonate compound for neutralizing acid with consistent dissolving rates for water treatment.

## Manganese Greensand

Manganese Greensand media is treated siliceous material for treating water containing iron, manganese and hydrogen sulfide.

## Anthracite

Anthracite is recommended as a filter media where additional silica in the water is not desirable and removes lighter weight turbidity.

## Activated Carbon

Activated carbon media is used to remove taste, odor and chlorine and used in many drinking water applications.

## ProSand

ProSand is based on a rare natural mineral. Its unique properties radically improve the performance and cost of media filtration.

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## Advantages of Multimedia Filtration

- Proven process and most tested forms of water treatment
- Modular control valves designed for operational flexibility
- Filtration media is inexpensive and long-lasting



Hub and laterals

- Resistant to fouling (clogging)
- Faster flow rates
- Produces high quality filtered water

Model #		Flow Rate								Tank Size D"xH"	Media Qty (ft <sup>3</sup> )	Pipe Size		Approx. Weight (lbs)
Option 1	Option 2	Minimum		Average		Peak		Backwash						
		GPM	M <sup>3</sup> /H	GPM	M <sup>3</sup> /H	GPM	M <sup>3</sup> /H	GPM	M <sup>3</sup> /H					
<b>Multi Layer Filters: Anthracite, Sand and Gravel (Turbidity Removal)</b>														
56F705MM	58F705MM	2.7	0.6	4.0	0.9	5.3	1.2	4.0	0.9	7x44	0.5	0.75"	1"	64
56F8075MM	58F8075MM	3.5	0.8	5.4	1.2	7.0	1.6	5.4	1.2	8x44	0.75	0.75"	1"	79
56F910MM	58F910MM	4.4	1.0	6.6	1.5	8.8	2.0	6.6	1.5	9x48	1	0.75"	1"	110
56F1015MM	58F1015MM	5.4	1.2	8.1	1.8	10.8	2.5	8.1	1.8	10x54	1.5	0.75"	1"	141
58F1220MM		7.8	1.8	11.7	2.7	15.6	3.5	11.7	2.7	12x52	2	1"		200
58F1325MM		9.2	2.1	13.8	3.1	18.4	4.2	13.8	3.1	13x54	2.5	1"		236
58F1435MM	28F1435MM	10.7	2.4	16.1	3.7	21.4	4.9	16.1	3.7	14x65	3.5	1.25"	1.5"	344
58F1645MM	28F1645MM	13.9	3.2	20.9	4.8	27.8	6.3	20.9	4.8	16x65	4.5	1.25"	1.5"	430
58F1855MM	28F1855MM	17.7	4.0	26.6	6.0	35.4	8.0	26.6	6.0	18x65	5.5	1.25"	1.5"	650
28F2175MM		24.1	5.5	36.2	8.2	48.2	11.0	36.2	8.2	21x62	7.5	1.5"		805
28F24100MM		31.4	7.1	47.1	10.7	62.8	14.3	47.1	10.7	24x72	10	1.5"		1067
31F30150MM		49.1	11.2	73.7	16.8	98.2	22.3	73.7	16.8	30x72	15	2"		1693
31F36210MM		70.7	16.1	106.1	24.1	116.2	26.4	106.1	24.1	36x72	21	2"		2555
31F42280MM		96.2	21.9	116.2	26.4	125.0	28.4	116.2	26.4	42x72	28	2"		3801
<b>AG Filters: Non-Hydrous Silicon Dioxide (Turbidity Removal)</b>														
56F705AG	58F705AG	1.9	0.4	2.7	0.6	3.2	0.7	2.7	0.6	7x44	0.5	0.75"	1"	39
56F8075AG	58F8075AG	2.5	0.6	3.5	0.8	4.2	1.0	3.5	0.8	8x44	0.75	0.75"	1"	46
56F910AG	58F910AG	3.1	0.7	4.4	1.0	5.3	1.2	4.4	1.0	9x48	1	0.75"	1"	58
56F1015AG	58F1015AG	3.8	0.9	5.4	1.2	6.5	1.5	5.4	1.2	10x54	1.5	0.75"	1"	72
58F1220AG		5.5	1.2	7.8	1.8	9.4	2.1	7.8	1.8	12x52	2	1"		92
58F1325AG		6.4	1.5	9.2	2.1	11.0	2.5	9.2	2.1	13x54	2.5	1"		105
58F1435AG	28F1435AG	7.5	1.7	10.7	2.4	12.8	2.9	10.7	2.4	14x65	3.5	1.25"	1.5"	155
58F1645AG	28F1645AG	9.7	2.2	13.9	3.2	16.7	3.8	13.9	3.2	16x65	4.5	1.25"	1.5"	185
58F1855AG	28F1855AG	12.4	2.8	17.7	4.0	21.2	4.8	17.7	4.0	18x65	5.5	1.25"	1.5"	241
28F2175AG		16.9	3.8	24.1	5.5	28.9	6.6	24.1	5.5	21x62	7.5	1.5"		354
28F24100AG		22.0	5.0	31.4	7.1	37.7	8.6	31.4	7.1	24x72	10	1.5"		455
31F30150AG		34.4	7.8	49.1	11.2	58.9	13.4	49.1	11.2	30x72	15	2"		761
31F36210AG		49.5	11.2	70.7	16.1	84.8	19.3	70.7	16.1	36x72	21	2"		1137
31F42280AG		67.3	15.3	96.2	21.9	115.4	26.2	96.2	21.9	42x72	28	2"		1638
<b>Activated Carbon Filters: Granular Form with High Degree of Porosity (Taste, Odor and Color Removal)</b>														
56F705AC	58F705AC	1.9	0.4	2.7	0.6	3.2	0.7	3.2	0.7	7x44	0.5	0.75"	1"	40
56F8075AC	58F8075AC	2.5	0.6	3.5	0.8	4.2	1.0	4.2	1.0	8x44	0.75	0.75"	1"	48
56F910AC	58F910AC	3.1	0.7	4.4	1.0	5.3	1.2	5.3	1.2	9x48	1	0.75"	1"	61
56F1015AC	58F1015AC	3.8	0.9	5.4	1.2	6.5	1.5	6.5	1.5	10x54	1.5	0.75"	1"	76
58F1220AC		5.5	1.2	7.8	1.8	9.4	2.1	9.4	2.1	12x52	2	1"		97
58F1325AC		6.4	1.5	9.2	2.1	11.0	2.5	11.0	2.5	13x54	2.5	1"		111
58F1435AC	28F1435AC	7.5	1.7	10.7	2.4	12.8	2.9	12.8	2.9	14x65	3.5	1.25"	1.5"	164
58F1645AC	28F1645AC	9.7	2.2	13.9	3.2	16.7	3.8	16.7	3.8	16x65	4.5	1.25"	1.5"	196
58F1855AC	28F1855AC	12.4	2.8	17.7	4.0	21.2	4.8	21.2	4.8	18x65	5.5	1.25"	1.5"	254
58F2175AC	28F2175AC	16.9	3.8	24.1	5.5	28.9	6.6	28.9	6.6	21x62	7.5	1.25"	1.5"	465
28F24100AC		22.0	5.0	31.4	7.1	37.7	8.6	37.7	8.6	24x72	10	1.5"		630
31F30150AC		34.4	7.8	49.1	11.2	58.9	13.4	58.9	13.4	30x72	15	2"		1038
31F36210AC		49.5	11.2	70.7	16.1	84.8	19.3	84.8	19.3	36x72	21	2"		1487
31F42280AC		67.3	15.3	96.2	21.9	115.4	26.2	115.4	26.2	42x72	28	2"		2393

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Model #		Flow Rate								Tank Size D"xH"	Media Qty (ft <sup>3</sup> )	Pipe Size		Ap- prox. Weight (lbs)
Option 1	Option 2	Minimum		Average		Peak		Backwash						
		GPM	M <sup>3</sup> /H	GPM	M <sup>3</sup> /H	GPM	M <sup>3</sup> /H	GPM	M <sup>3</sup> /H					
<b>Birm Filters: Insoluble Catalyst (Fe and Mn Reduction)</b>														
56F705BM	58F705BM	1.9	0.4	2.7	0.6	3.2	0.7	3.2	0.7	7x44	0.5	0.75"	1"	48
56F8075BM	58F8075BM	2.5	0.6	3.5	0.8	4.2	1.0	4.2	1.0	8x44	0.75	0.75"	1"	60
56F910BM	58F910BM	3.1	0.7	4.4	1.0	5.3	1.2	5.3	1.2	9x48	1	0.75"	1"	77
56F1015BM	58F1015BM	3.8	0.9	5.4	1.2	6.5	1.5	6.5	1.5	10x54	1.5	0.75"	1"	100
58F1220BM		5.5	1.2	7.8	1.8	9.4	2.1	9.4	2.1	12x52	2	1"		130
58F1325BM		6.4	1.5	9.2	2.1	11.0	2.5	11.0	2.5	13x54	2.5	1"		153
58F1435BM	28F1435BM	7.5	1.7	10.7	2.4	12.8	2.9	12.8	2.9	14x65	3.5	1.25"	1.5"	222
58F1645BM	28F1645BM	9.7	2.2	13.9	3.2	16.7	3.8	16.7	3.8	16x65	4.5	1.25"	1.5"	270
58F1855BM	28F1855BM	12.4	2.8	17.7	4.0	21.2	4.8	21.2	4.8	18x65	5.5	1.25"	1.5"	345
28F2175BM		16.9	3.8	24.1	5.5	28.9	6.6	28.9	6.6	21x62	7.5	1.5"		597
28F24100BM		22.0	5.0	31.4	7.1	37.7	8.6	37.7	8.6	24x72	10	1.5"		795
31F30150BM		34.4	7.8	49.1	11.2	58.9	13.4	58.9	13.4	30x72	15	2"		1285
31F36210BM		49.5	11.2	70.7	16.1	84.8	19.3	84.8	19.3	36x72	21	2"		1883
31F42280BM		67.3	15.3	96.2	21.9	115.4	26.2	115.4	26.2	42x72	28	2"		2921
<b>Calcite Filters : pH Neutralization</b>														
56F705CF	58F705CF	1.9	0.4	2.7	0.6	3.2	0.7	3.2	0.7	7x44	0.5	0.75"	1"	51
56F8075CF	58F8075CF	2.5	0.6	3.5	0.8	4.2	1.0	4.2	1.0	8x44	0.75	0.75"	1"	65
56F910CF	58F910CF	3.1	0.7	4.4	1.0	5.3	1.2	5.3	1.2	9x48	1	0.75"	1"	83
56F1015CF	58F1015CF	3.8	0.9	5.4	1.2	6.5	1.5	6.5	1.5	10x54	1.5	0.75"	1"	109
58F1220CF		5.5	1.2	7.8	1.8	9.4	2.1	9.4	2.1	12x52	2	1"		142
58F1325CF		6.4	1.5	9.2	2.1	11.0	2.5	11.0	2.5	13x54	2.5	1"		168
58F1435CF	28F1435CF	7.5	1.7	10.7	2.4	12.8	2.9	12.8	2.9	14x65	3.5	1.25"	1.5"	243
58F1645CF	28F1645CF	9.7	2.2	13.9	3.2	16.7	3.8	16.7	3.8	16x65	4.5	1.25"	1.5"	297
58F1855CF	28F1855CF	12.4	2.8	17.7	4.0	21.2	4.8	21.2	4.8	18x65	5.5	1.25"	1.5"	378
28F2175CF		16.9	3.8	24.1	5.5	28.9	6.6	28.9	6.6	21x62	7.5	1.5"		645
28F24100CF		22.0	5.0	31.4	7.1	37.7	8.6	37.7	8.6	24x72	10	1.5"		855
31F30150CF		34.4	7.8	49.1	11.2	58.9	13.4	58.9	13.4	30x72	15	2"		1375
31F36210CF		49.5	11.2	70.7	16.1	84.8	19.3	84.8	19.3	36x72	21	2"		2027
31F42280CF		67.3	15.3	96.2	21.9	115.4	26.2	115.4	26.2	42x72	28	2"		3113
<b>Manganese Greensand Filters: Enriched Quality with High Catalytic Capacity (Fe, Mn and H<sub>2</sub>S Reduction)</b>														
56F705GS	58F705GS	1.9	0.4	2.7	0.6	3.2	0.7	3.2	0.7	7x44	0.5	0.75"	1"	71
56F8075GS	58F8075GS	2.5	0.6	3.5	0.8	4.2	1.0	4.2	1.0	8x44	0.75	0.75"	1"	94
56F910GS	58F910GS	3.1	0.7	4.4	1.0	5.3	1.2	5.3	1.2	9x48	1	0.75"	1"	122
56F1015GS	58F1015GS	3.8	0.9	5.4	1.2	6.5	1.5	6.5	1.5	10x54	1.5	0.75"	1"	168
58F1220GS		5.5	1.2	7.8	1.8	9.4	2.1	9.4	2.1	12x52	2	1"		220
58F1325GS		6.4	1.5	9.2	2.1	11.0	2.5	11.0	2.5	13x54	2.5	1"		265
58F1435GS	28F1435GS	7.5	1.7	10.7	2.4	12.8	2.9	12.8	2.9	14x65	3.5	1.25"	1.5"	379
58F1645GS	28F1645GS	9.7	2.2	13.9	3.2	16.7	3.8	16.7	3.8	16x65	4.5	1.25"	1.5"	473
58F1855GS	28F1855GS	12.4	2.8	17.7	4.0	21.2	4.8	21.2	4.8	18x65	5.5	1.25"	1.5"	593
28F2175GS		16.9	3.8	24.1	5.5	28.9	6.6	28.9	6.6	21x62	7.5	1.5"		957
28F24100GS		22.0	5.0	31.4	7.1	37.7	8.6	37.7	8.6	24x72	10	1.5"		1245
31F30150GS		34.4	7.8	49.1	11.2	58.9	13.4	58.9	13.4	30x72	15	2"		1960
31F36210GS		49.5	11.2	70.7	16.1	84.8	19.3	84.8	19.3	36x72	21	2"		2963
31F42280GS		67.3	15.3	96.2	21.9	115.4	26.2	115.4	26.2	42x72	28	2"		4361

\*All filters require periodic backwashing to dispose of the accumulated debris. This is accomplished by backwashing clean water through the unit and then disposing of the effluent.

 <p><b>Pure Aqua, Inc.®</b> Water Treatment and Reverse Osmosis Systems sales@pureaqua.com      Tel: +1-714-432-9996 www.pureaqua.com      Fax: +1-714-432-9898</p>		<p>Authorized Dealer:</p>
		