

# FBF Series Light Commercial Filters



## STANDARD FEATURES

¾" AND 1" VALVE - Performa™  
 TOP MOUNT  
 ERCt ELECTRONIC TIMER  
 POLYGLASS MINERAL TANKS  
 POTASSIUM PERMANGANATE FEED TANK (IRON FILTERS ONLY)  
 SINGLE POINT ABS DISTRIBUTOR

## OPTIONAL FEATURES

ERCd ELECTRONIC DEMAND CONTROLLER  
 COPPER TUBE CONNECTION

## OPERATING CONDITIONS

WATER PRESSURE 20 TO 120 PSI  
 COLD WATER OPERATION 100°F MAXIMUM TEMPERATURE

## FBF SERIES SPECIFICATION

**MINERAL TANK.** The mineral tank shall be "polyglass" consisting of an inner shell of virgin polyethylene and an external shell of continuous fiberglass roving. Tanks shall be rated at 150 psi operating pressure, 120°F operating temperature with 2½"-8 UN threaded top opening.

**INTERNALS.** The distributor shall be a 2½" Ø single point molded distributor head with 1½" of slotted length and a ¾" female socket welded connection. The slots shall be 0.012" - 0.016" wide to retain mineral and the total slot area shall be equal to or larger than the unit pipe size. The distributor pipe shall be ¾" schedule 40 white PVC.

**MEDIA.** The resin shall be sodium form polystyrene 8% divinyl benzene cross linked resin with clear spherical beads. Resin beads shall be 16-50 US Standard Mesh with a particle size range of 0.3 to 1.2 mm. The resin shall be clean and packaged in sealed plastic bags weighing 55 lbs or less.

**UNDERBEDDING.** The bottom of this mineral tank shall be filled above the distributor with #20 graded washed flint gravel sieved between 1/8" and 1/16".

**CONTROL VALVE.** The main control valve(s) shall be the Performa™ controlled with electronic controller to actuate the cycles of backwash, brine, slow rinse, fast rinse, and service. The control valve(s) shall be Performa™ 5-Cycle, 100 psi, multi-port control valve(s) with glass filled Noryl-NSF listed material, camshaft, drive motor assembly, and NEMA 3 enclosure (115VAC/60Hz). The valve shall be of a single camshaft design and not use multiple plungers or diaphragm valves. Hard water by-pass shall be available during all regeneration cycles. The drain line connection shall be ¾" NPT, female.

**CONTROLLER.** The ERCt shall be 7-day or up to 99-day regeneration frequency. Both the ERCt and ERCd Controllers shall have a calculated brine time when salt and resin quantities are entered.

**DEMAND REGENERATION.** (optional) The FBF series can be demand regenerated by using the ERCd Controller and the internal 1" TM meter. The ERCd Controller (optional) shall be a 28-day variable reserve.

**OPERATING CONDITIONS.** Maximum temperature shall be 100°F. Pressure shall be 25 to 120 psi.

## FBF Filter – Application Table

### Multimedia Filter Sizing and Selection Chart

PART NO.	MODEL	TANK (inches)	DIA. (inches)	AREA (ft2)	FLOW RANGE (gpm)		BACKWASH RATE (gpm)
					3 gpm/ft2	8 gpm/ft2	
930599 / 930600 (1)	FBF 30 MM	9x48 FRP	9	0.44	1.3	3.5	6
930601 / 930602 (1)	FBF 50 MM	12x52 FRP	12	0.79	2.4	6.3	10
930603 / 930604 (1)	FBF 70 MM	13x54 FRP	13	0.92	2.8	7.4	12
930605 / 930606 (1)	FBF 100 MM	14x65 FRP	14	1.07	3.2	8.5	15
930607 / 930608 (1)	FBF 120 MM	16x65 FRP	16	1.40	4.2	11.2	20

### Activated Carbon Filter Sizing and Selection Chart

PART NO.	MODEL	TANK (inches)	DIA. (inches)	AREA (ft2)	FLOW RANGE (gpm)		BACKWASH RATE (gpm)
					3 gpm/ft2	8 gpm/ft2	
930619 / 930620 (1)	FBF 30 AC	9x48 FRP	9	0.44	0.9	2.6	3.9
930621 / 930622 (1)	FBF 50 AC	12x52 FRP	12	0.79	1.6	4.7	6
930623 / 930624 (1)	FBF 70 AC	13x54 FRP	13	0.92	1.8	5.5	8
930625 / 930626 (1)	FBF 100 AC	14x65 FRP	14	1.07	2.1	6.4	10
930627 / 930628 (1)	FBF 120 AC	16x65 FRP	16	1.40	2.8	8.4	12
930629 / 930630 (1)	FBF 150 AC	21x62 FRP	21	2.40	5.0	14	20

### Manganese Greensand Filter Sizing and Selection Chart

PART NO.	MODEL	TANK (inches)	DIA. (inches)	AREA (ft2)	FLOW RANGE (gpm)		BACKWASH RATE (gpm)
					3 gpm/ft2	8 gpm/ft2	
930579 / 930580 (1)	FBF 30 I	9x48 FRP	9	0.44	1.3	2.2	5.3
930581 / 930582 (1)	FBF 50 I	12x52 FRP	12	0.79	2.4	3.9	8
930583 / 930584 (1)	FBF 70 I	13x54 FRP	13	0.92	2.8	4.6	10
930585 / 930586 (1)	FBF 100 I	14x65 FRP	14	1.07	3.2	5.3	15
930587 / 930588 (1)	FBF 120 I	16x65 FRP	16	1.40	4.2	7.0	15

### Neutralizing Filter Sizing and Selection Chart

PART NO.	MODEL	TANK (inches)	DIA. (inches)	AREA (ft2)	FLOW RANGE (gpm)		BACKWASH RATE (gpm)
					3 gpm/ft2	8 gpm/ft2	
930679 / 930680 (1)	FBF 30 N	9x48 FRP	9	0.44	1.3	2.6	5.3
930681 / 930682 (1)	FBF 50 N	12x52 FRP	12	0.79	2.4	4.7	8
930683 / 930684 (1)	FBF 70 N	13x54 FRP	13	0.92	2.8	5.5	10
930685 / 930686 (1)	FBF 100 N	14x65 FRP	14	1.07	3.2	6.4	15
930687 / 930688 (1)	FBF 120 N	16x65 FRP	16	1.40	4.2	8.4	15

### Sand Filter Sizing and Selection Chart

PART NO.	MODEL	TANK (inches)	DIA. (inches)	AREA (ft2)	FLOW RANGE (gpm)		BACKWASH RATE (gpm)
					3 gpm/ft2	8 gpm/ft2	
930659 / 930660 (1)	FBF 30 S	9x48 FRP	9	0.44	0.9	1.3	6
930661 / 930662 (1)	FBF 50 S	12x52 FRP	12	0.79	1.6	2.4	10
930663 / 930664 (1)	FBF 70 S	13x54 FRP	13	0.92	1.8	2.8	12
930665 / 930666 (1)	FBF 100 S	14x65 FRP	14	1.07	2.1	3.2	15
930667 / 930668 (1)	FBF 120 S	16x65 FRP	16	1.40	2.8	4.2	20