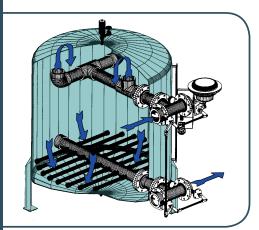
# >> PERMANENT MEDIA FILTERS



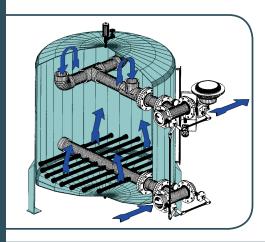
#### **PERMANENT MEDIA FILTRATION**

Permanent media filtration has a distinct advantage over disposable bags, cartridges or hydrocyclone separators. Permanent media filtration is a positive filtering media that is easily backwashed for cleaning. **PUROFLUX** filters utilize the finest media. This media can be used individually or combined to optimize filtration efficiency. **PUROFLUX** standard media physically removes particulate 10 micron and smaller.



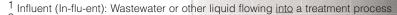
#### FILTRATION CYCLE

Influent¹ is directed through a series of valves into the over drain of the filter, where it is evenly distributed over the filtration media. It is then forced down through the media bed where the suspended particulate is trapped in the voids formed between the media. The clean effluent² then passes through the underdrain and is returned to the original source. As the voids in the media are filled, the filter will start to blind off. When the maximum differential pressure is reached, the filter will require a backwash.



#### **BACKWASH CYCLE**

The filter is backwashed by reversing the fluid flow through the filter. The backwash fluid is directed into the filter through the underdrain and up through the media. As the backwash fluid moves through the media it causes the bed to lift and separate. The tumbling action of the media causes a scouring effect which releases trapped particulate and suspends it in the backwash flow. The fluid then carries the particulate that is suspended up through the overdrain and out to waste.



<sup>&</sup>lt;sup>2</sup> Effluent (Ef-lu-ent): Wastewater or other liquid flowing from a treatment process







### PF-20 SERIES - Designed For Low Pressure Open Applications - 75 PSI

Ref PF-20



- Available in flow rates of 15, 35, 65, 100, 140, 190 and 250 GPM.
- Positive filtration down to 10-micron (lower micron media available).
- Non-code 304-stainless steel vessel rated at 75 psi with epoxy coated carbon steel hand-hole covers (optional higher pressure ratings and ASME code stamp available).
- Industrial grade brass 3-way ball valves and Sch. 80 PVC interconnecting piping (models PF-2036, PF-2042 and PF-2048 equipped with cast iron butterfly valves).
- Cast iron bronze fitted, close-coupled end suction centrifugal pump, TEFC motor and cast iron pre-strainer with removable SST basket.
- Skid fusion bonded polyester coated carbon steel.
- Automatic option includes: UL labeled NEMA type 4X control cabinet (door disconnect switch, motor starter with short circuit/overload protection, step-down transformer. pressure differential switch, adjustable solid state timer, 24-hr, backwash clock, and remote start-stop with pump HOA switch), electric actuator.

MODEL	FLOW RATE	FILTRATION AREA	VALVE SIZE	MOTOR	DIMENSIONS			WEIGHT, LBS	
Number	GPM	Sq. Ft.	Inches	HP	L	Н	W	Shipping	Oper.
PF-2012	15	0.78	1.0	1.0	36"	41"	25"	400	450
PF-2018	35	1.77	1.5	1.5	42"	42"	31"	570	730
PF-2024*	65	3.14	1.5	2.0	48"	42"	35"	980	1240
PF-2030*	100	4.91	2.0	3.0	60"	43"	42"	1120	1470
PF-2036*	140	7.10	2.5	5.0	68"	49"	48"	1825	2365
PF-2042	190	9.60	3.0	5.0	78"	50"	52"	2530	3240
PF-2048	250	12.60	4.0	5.0	90"	71"	59"	5200	6850

<sup>\* 24&</sup>quot;, 30", 36" vessels available in fiberglass reinforced polyester (packaged de-rated to 50 psi).

## PF-30 SERIES - Designed For Higher Pressure Applications - 100 PSI

Ref. PF-30



- Available in flow rates of 15, 35, 65, 100, 140, 190 and 250 GPM.
- Positive filtration down to 10 micron (lower micron media available).
- Non-code carbon steel vessel rated at 100 psi with fusion bonded epoxy lining & polyester coating (optional higher pressure ratings and ASME code stamp available).
- Industrial grade brass 3-way ball valves and Sch. 80 PVC interconnecting piping (models PF-3036, PF-3042 and PF-3048 equipped with cast iron butterfly valves).
- Cast iron bronze fitted, close coupled end suction centrifugal pump. TEFC motor and cast iron pre-strainer with removable SST basket.
- Skid fusion bonded polyester coated carbon steel.
- · Automatic option includes: UL labeled NEMA type 4X control cabinet (door disconnect switch, motor starter with short circuit/overload protection, step-down transformer, pressure differential switch, adjustable solid state timer, 24-hr. backwash clock, and remote start-stop with pump HOA switch), electric actuator.

MODEL	FLOW RATE	FILTRATION AREA	VALVE SIZE	MOTOR	DIMENSIONS		WEIGHT, LBS		
Number	GPM	Sq. Ft.	Inches	HP	L	Н	W	Shipping	Oper.
PF-3012	15	0.78	1.0	1.0	36"	41"	25"	400	450
PF-3018	35	1.77	1.5	1.5	42"	42"	31"	600	760
PF-3024	65	3.14	1.5	2.0	48"	42"	35"	930	1190
PF-3030	100	4.91	2.0	3.0	60"	43"	42"	1120	1470
PF-3036	140	7.10	2.5	5.0	68"	49"	48"	1750	2290
PF-3042	190	9.60	3.0	5.0	78"	50"	52"	2400	3110
PF-3048	250	12.60	4.0	5.0	90"	71"	59"	5200	6850

satisfy most applications. Standard filters are designed to handle a multitude of pressures and flows. Systems can be

PUROFLUX offers a wide variety of filtration products to engineered upon request to fit specific applications and configurations. **PUROFLUX** filters can be equipped with either manual or fully automated backwash controls.

## PF-40 SERIES - Designed For Larger Process And Industrial Applications

Ref. PF-50



- Available in flow rates from 65 to 1.000 GPM.
- Positive filtration down to 10-micron (lower micron media available).
- Fusion bonded epoxy lined/polyester coated carbon steel vessel rated at 50 psi (optional higher pressure ratings and ASME code stamp available).
- Cast iron lug style butterfly valves with SST disc.
- Automatic option includes: (120v/1ph) NEMA type 4X control cabinet, (door disconnect switch, pressure differential switch, adjustable solid state timer and 24 hr. backwash clock),
- Optional UL labeled 3-phase panel, pump, pre-strainer, face piping, skid and pneumatic actuator are available.

MODEL	FLOW RATE	FILTRATION AREA	VALVE SIZE	DIMENSIONS			WEIGHT, LBS		
Number	GPM	Sq. Ft.	Inches	L	Н	W	Shipping	Oper.	
PF-4024	65	3.14	2.0	48"	62"	34"	1100	1610	
PF-4030	100	4.91	2.0	54"	64"	38"	1850	2700	
PF-4036	140	7.10	3.0	60"	66"	44"	2245	3740	
PF-4042	190	9.60	3.0	70"	80"	48"	3925	6290	
PF-4048	250	12.60	4.0	76"	82"	54"	5185	8290	
PF-4054	315	15.90	4.0	82"	82"	58"	6685	10615	
PF-4060	390	19.60	4.0	88"	84"	64"	8400	13500	
PF-4066	475	23.80	4.0	94"	86"	68"	10360	16445	
PF-4072	565	28.30	6.0	105"	88"	74"	13100	20600	
PF-4078	665	33.20	6.0	108"	90"	80"	16030	25280	
PF-4084	770	38.50	6.0	116"	92"	86"	19600	30435	
PF-4090	885	44.20	6.0	124"	94"	92"	22350	35000	
PF-4096	1000	50.30	8.0	132"	100"	98"	28975	43585	

Consult factory for multi-vessel applications for higher flow rates.

## PF-50 SERIES - Designed For Closed Loop HVAC Applications

• Available in flow rates of 15, 35, 65, 100, 140 and 190 GPM.

- Positive filtration down to 5 micron (lower micron media available).
- Fusion bonded epoxy lined/polyester coated carbon steel vessel rated for 150 psi at 150° F (optional higher pressure ratings and ASME code stamp available).
- Industrial grade brass 2-way ball valves (models PF-5036 and PF-5042 equipped with cast iron butterfly valves).
- Automatic option includes: (120v/1ph) NEMA type 4X control cabinet, (door disconnect switch, adjustable solid state timer and 24 hr. backwash clock), electric actuators.
- Optional UL labled 3-phase panel, pump, pre-strainer, face piping and skid packages

MODEL	FLOW RATE	FILTRATION AREA	VALVE SIZE	DIMENSIONS			WEIGHT, LBS		
Number	GPM	Sq. Ft.	Inches	L	Н	W	Shipping	Oper.	
PF-5012	15	0.78	1.0	29"	38"	28"	300	350	
PF-5018	35	1.77	1.5	37"	42"	33"	480	640	
PF-5024	65	3.14	1.5	43"	45"	36"	700	960	
PF-5030	100	4.91	2.0	49"	49"	42"	860	1210	
PF-5036	140	7.10	2.5	64"	55"	48"	1350	1890	
PF-5042	190	9.60	3.0	71"	59"	54"	2050	2760	

Consult factory for options not shown.

All weights and dimensions are approximates. Rev. 11/2016











