## **Series BF**





#### Features:

- Sealless Pump Runs Dry Without Damage
- Choice of Filter Bag Micron Porosity
- Chemical Resistant
- No Direct Metal Contact With Solution
- CPVC/Polypro/PVDF Construction
- High Temperature Operation

#### **Recommended Applications:**

- Electroless Nickel
- Electroless Copper
- Rinse Tanks
- Etching And Electropolishing
- Waste Treatment Pre-Filtration

Penguin Series BF bag filtration systems are designed to provide rapid, high velocity solution turnover, while removing contaminants that tend to "surface load". The larger surface area of the single layered polypropylene filter bag provides significant longer life when compared to a graded density, string wound cartridge filter. One PB-7, 7" diameter by 16.5" long, bag is equivalent to approximately twelve  $2^{1/2}$ " diameter by 10" long string wound filters. Disposable bags are economical to use and may be easily discarded when spent or cleaned for reuse.

Penguin bag filtration systems are corrosion-resistant, metalless, confined to the tank compact, and require no floor space. These systems can be mounted as an in-tank or out-of-tank pump with a tank lip-mounted bag stand. The materials in contact with the solution are CPVC, polypropylene, and high temperature PVDF, thus providing a highly corrosion-resistant filter system.

Series BF bag systems include a flow control valve and a bypass valve for liquid transfer. For easy filter bag cleaning or replacement, a polypropylene quick disconnect coupling is supplied. A polypropylene bag adaptor head with CPVC split ring is provided to firmly secure the bag in place and to prevent it from accidentally detaching itself from the adaptor head. Bag adaptor heads are available with 1" or  $1^{1}/_{2}$ " FNPT openings.

#### **Filter Bags**

Penguin polypropylene single layered felt bags are available in micron ratings from 1 to 100. Polypropylene mesh monofilament bags are available in micron ratings greater than 100 micron through 300 micron. Bag rings are fabricated in PVC coated steel or optional 316SS. Bags are offered with nominal 5" and 7" diameter openings in single and double lengths.

#### Pumps

Penguin Series P sealless vertical pumps employed on bag systems are constructed of CPVC with a viton elastomer and a high temperature PVDF impeller as standard. There is no liquid to metal contact. These pumps are compact, portable, and self-priming when immersed in solution. Because of their unique impeller design, these pumps have no mechanical seals, no pump bearings, no bushings, no wearing parts, and thus have almost unlimited dry run capability. Series P pumps are simple in design and efficient in performance, while requiring little or no maintenance.



# **Series BF**

### **Bag** Filtration System

Specifications				
			Filtration Rate	
Model	Bag Model	Pump Model	GPH	
BF-P50	PB-5	P-1/6A	1200	
BF-P50L		P-1/4A	1600	
BF-P100	PB-7	P-1/2A	2400	
BF-P100L		P-3/4A	3600	

Bag Sp	ecific	ations		
	Micron	Surface		Length
Model	Rating	Area - Ft. 2	Diameter	(inches)
PB-5-1	1			
PB-5-5	5			
PB-5-10	10	2.0		20.0
PB-5-25	25			
PB-5-50	50			
PB-5-100	100		5	
PB-5L-1	1			
PB-5L-5	5			
PB-5L-10	10	3		30.0
PB-5L-25	25			
PB-5L-50	50			
PB-5L-100	100			
PB-7-1	1			
PB-7-5	5			
PB-7-10	10	2.0		16.5
PB-7-25	25			
PB-7-50	50			
PB-7-100	100		7	
PB-7L-1	1			
PB-7L-5	5			
PB-7L-10	10	4.0		33.0
PB-7L-25	25			
PB-7L-50	50			
PB-7L-100	100			

### Nomenclature

PB	7
Penguin	Diameter/Length
Filter	5 = 5/20.0
Bag	5L = 5/30.0
System	7 = 7/16.5
	7L = 7/33.0

7	10
r/Length	Micron Ratir
5/20.0	1 = 1
5/30.0	5 = 5
7/16.5	10 = 10
7/33.0	25 = 25
	50 = 50
	100 = 100

D				
ating	Ring/Material of Construction			
	D = PVC coated steel			
	S = 316 SS			
0				
5				
0	Not all combinations available.			
00	Contact factory.			

Model PB-7L-50D

