



# K-FLOW Engineering



Bag Filter



## Bag Filter Housings

Model	Single Bag (S4,S8), Multi-Bag (MX)			
Basket Diameter	4", 8"			
Basket Depth	6", 12", 15", 30"			
No. of Basket	2, 3, 4, 6, 8, 12, 17, 23			
Pipe Size	¾", 1", 1-¼", 1-½", 2", 3", 4", 6", 8", 10", 12"			
Connection	BSPT, NPT, JIS 10K, 20K RF, ANSI 150, 300LB RF, DIN PN16			
Outlet Style	Bottom, Side			
Pressure Rating	150 psi, 300 psi, 500 psi			
Mesh Size	20, 30, 40, 50, 60, 70, 80, 100, 150 or 200			
ASME Code	With Stamp, Without Stamp			
<b>Material</b>				
Housing	Carbon Steel, 304 Stainless Steel, 316, 316L Stainless Steel			
Screen	Stainless Steel 304, Stainless Steel 316, 316L			
Displacer	No Displacer, With Displacer			
Cover Gasket	Buna-N, Ethylene Propylene, Viton, Telfon, Fluorocarbon Resin, Special Material			
Option	Sanitary Fitting, Higher Pressure Rating, Corrosion Allowance, Differential Pressure Indicator & Switch, Steam Jacket, Special Outlet Location, Duplex System, Manual & Auto-Back Flushing Type			

## Filter Bags

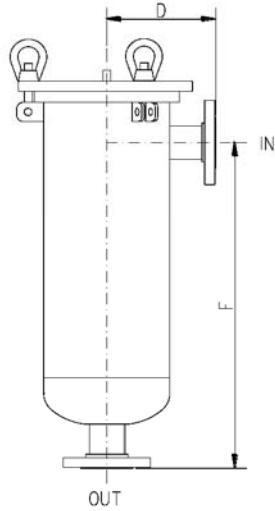
Fiber	Felt Polyester, Felt Polypropylene, Felt Teflon, Felt Nomex Nylon, Mesh Mono-filament Nylon, Mesh Multi-filament Polyester, Mesh Multi-filament Nylon.			
Micron Rating	1, 3, 5, 10, 15, 25, 50, 75, 100, 200, 250, 300			
Bag Finish	Standard, Fiber-Free glazed Finish			
Bag Dimension	No.	Dia. (in.)	Length (in.)	Model
	1	7-1/16	16-1/2	8-15
	2	7-1/16	32	8-30
	4	4-1/8	14	4-12
Bag Ring	Stainless Steel, Plastics.			

Bag Filter/Strainer Basket Data			
Basket Style	Strainer / Filter Basket Area (m <sup>2</sup> )	Strainer / Filter Basket Volume (cm <sup>3</sup> )	
4-6	0.046	1,136	
4-12	0.0929	2,271	
8-15	0.158	7,079	
8-30	0.409	17,829	
Multi	0.409	17,260	
Maximum Recommended Operation Temperatures For Gasket/Housing Materials			
BUNA-N		120 °C	
EPDM		176 °C	
VITON		232 °C	
TEFLON		260 °C	
CARBON STEEL		205 °C	
304 STAINLESS STEEL		205 °C	
316 STAINLESS STEEL		205 °C	
U.S. Mesh VS. Micron Particle Size			
U.S. mesh	Microns	U.S. mesh	Microns
16	1190	120	125
20	841	140	105
30	595	200	74
40	420	325	44
60	250	400	37
80	177		
100	149		
Recommend Flow Rate for Bag Filter			
Model No.	Filtering Area (m <sup>2</sup> )	Recommend Flow Rate (m <sup>3</sup> /hr)	
4-6	0.046	12	
4-12	0.093	12	
8-15	0.214	50	
8-30	0.409	50	
M-2	0.818	90	
M-3	1.227	136	
M-4	1.636	180	
M-6	2.454	272	
M-8	3.272	363	
M-12	4.908	454	
M-17	6.953	795	
M-23	9.407	1022	

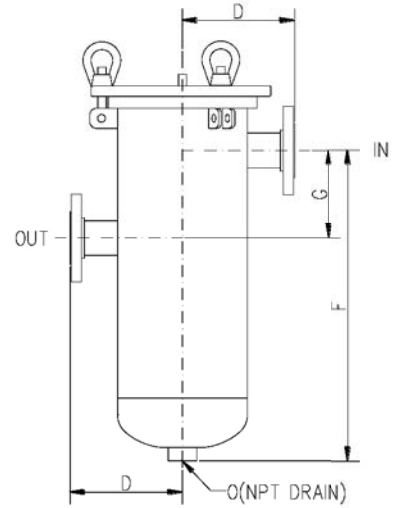
# Outlet Style

## Single Bag

**Bottom Outlet**

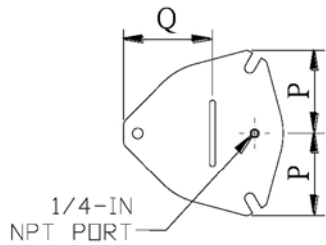


**Side Outlet**

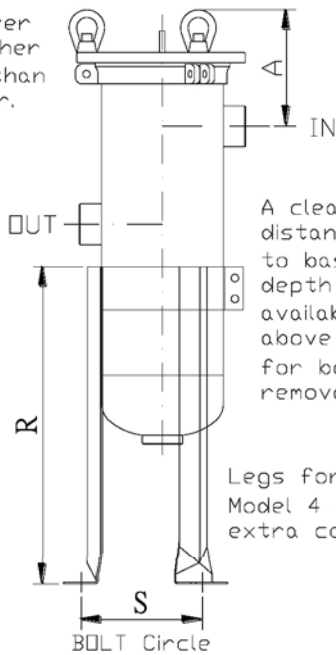


## Dimensions

**Single Bag**



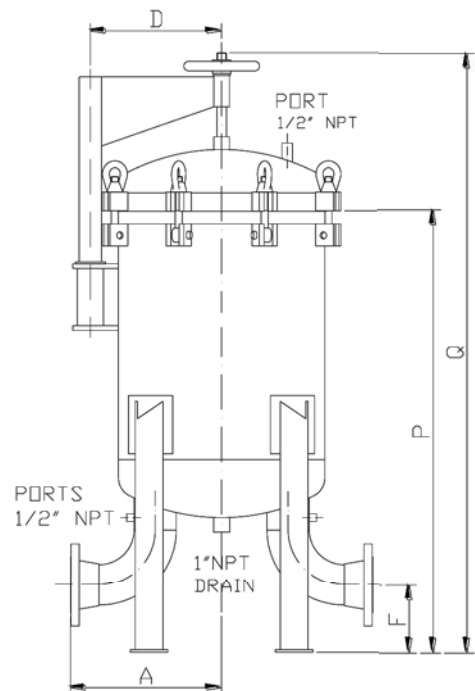
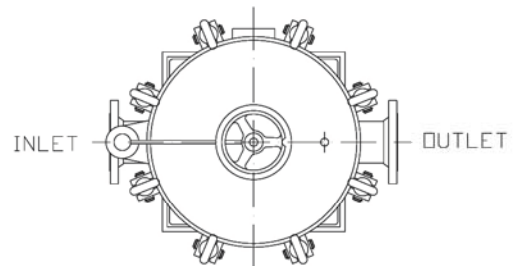
Eyenet cover permits higher pressure than clamp cover.



A clearance distance equal to basket depth must be available above housing for basket removal.

Legs for Model 4 are extra cost.

**Multi Bag**



Dimensions, Inches							
Model	Pipe Size	A	D	F	P	Q	R
4-6	¾	5.5	5.0	12.0	3.5	3.6	14.0
	1	5.5	5.0	12.0			
	1-¼	6.0	5.0	12.0			
	1-½	6.0	5.0	12.0			
	2	6.0	5.0	12.0			
4-12	¾	5.5	5.0	18.0	3.5	3.6	14.0
	1	5.5	5.0	18.0			
	1-¼	5.5	5.0	18.0			
	1-½	5.5	5.0	18.0			
	2	5.5	5.0	18.0			
8-15	2	6.6	7.5	23.5	5.8	6.3	22.0
	3	7.4	7.5	24.6			
	4	7.4	8.6	25.1			
8-30	2	6.6	7.5	38.5	5.8	6.3	22.0
	3	7.4	7.5	39.6			
	4	7.4	8.6	40.1			
M-2	2	10.5	10.9	4.50	40.2	55.2	
	3	12.4	10.9	5.25	42.6	57.6	
	4	14.0	10.9	6.00	44.8	59.9	
M-3	2	11.1	11.9	4.50	40.6	56.1	
	3	13.0	11.9	5.25	43.0	58.5	
	4	14.6	11.9	6.00	45.3	60.8	
M-4	3	13.8	14.0	5.25	43.9	60.4	
	4	15.4	14.0	6.00	46.2	62.7	
	6	18.9	14.0	7.00	50.4	66.9	
M-6	3	14.9	15.0	5.25	44.2	61.2	
	4	16.6	15.0	6.00	46.5	63.5	
	6	20.1	15.0	7.00	50.6	67.6	
M-8	4	18.7	18.0	6.00	47.6	66.1	
	6	22.2	18.0	7.00	51.9	70.4	
	8	25.7	18.0	8.25	56.4	74.9	
M-12	6	24.1	21.0	7.00	53.4	73.4	
	8	27.6	21.0	8.25	57.9	77.9	
	10	30.6	21.0	9.50	62.4	82.4	
M-17	8	59.1	24.0	8.25	59.2	80.7	
	10	65.1	24.0	9.50	63.5	85.0	
	12	72.2	24.0	11.00	68.0	89.5	
M-23	8	31.8	27.0	8.25	59.9	85.2	
	10	34.8	27.0	9.50	64.4	89.7	
	12	38.3	27.0	11.00	69.2	94.5	

Model	Filtering area, ft <sup>2</sup>	Recommended Flow rate, GPM
4-6	0.5	50
4-12	1.0	50
8-15	2.3	220
8-30	4.4	220
M-2	8.8	400
M-3	13.2	600
M-4	17.6	800
M-6	26.4	1200
M-8	35.2	1600
M-12	52.8	2000
M-17	74.8	3500
M-23	101.2	4500

## Main Applications

### Food / Beverages / Cosmetics

Sugar Solutions  
Syrups  
Trap filter for beer  
Wine in intermediate treatments  
Wine as pre-filter for membrane  
Milk  
Process water  
Water for bottle rinsing  
Spirits  
Lotions  
Shampoos  
De-mineralized water (pre-filter)  
Perfumes

### Chemicals / Oil / Lubricants

Up stream reverse osmosis  
Organic solvents, acids, and oxidizing agents  
Chemical solutions  
Petroleum oils

### Electronic

Magnetic paint  
D.I. and R.O. water pre-filtration  
Photo Resists  
Acids  
Bases  
Solvents for ultrasonic cleaning

### General Process

Automotive paints  
Printing inks  
Paper coating  
Electro plating  
Waste water

## Enclosures

### Mesh-Micron Conversion Chart

Micron	37	44	53	63	74	88	105	125	149	177	210
Mesh	400	325	270	230	200	170	140	120	100	80	70

Beta is the ratio of the number of particles greater than a given size in the influent, compared with the those of the same size or larger in the effluent.

It is related to removal efficiency as follows:

$$\% \text{ removal efficiency} = \left[ 1 - \left( \frac{1}{\text{Beta}} \right) \right] \times 100 \%$$