BEHRINGER®

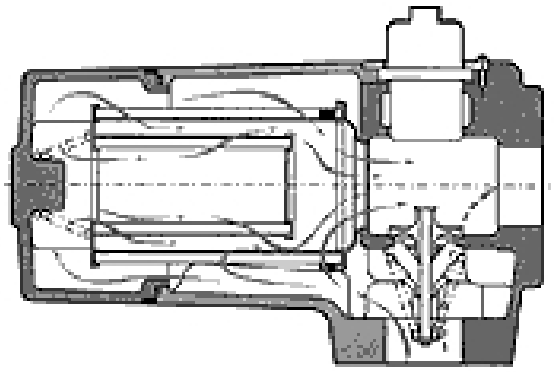
BSF Series

In-Line Suction Filter Assemblies

Dual Element Multi-Port Design

Operation

The Behringer® BSF Series Suction Filters are designed to protect you sensitive pump applications. The fluid flows directly from the reservoir to the inlet side of the filter. Once inside the filter, the fluid flows through a dual element. The dual element design allows for 4-times the filtering area of competitor designs. This allows a smaller, much more compact unit, with higher flow rates and a lower initial pressure drop.



Bypass Valve

The filter has an integral bypass located in the filter head. Because the bypass in located in the filter head, the bypassed flow does not pass over the contaminated element. This greatly reduces the risk of dumping contamination from the dirty side to the downstream side through the bypass.

Performance:

Connections:	1" to 3-1/2" NPT 1" to 3-1/2" SAE Flange
Temperature:	Buna -45°F to 225°F Viton -20°F to 250°F
Flows to:	150 gpm (569 lpm)

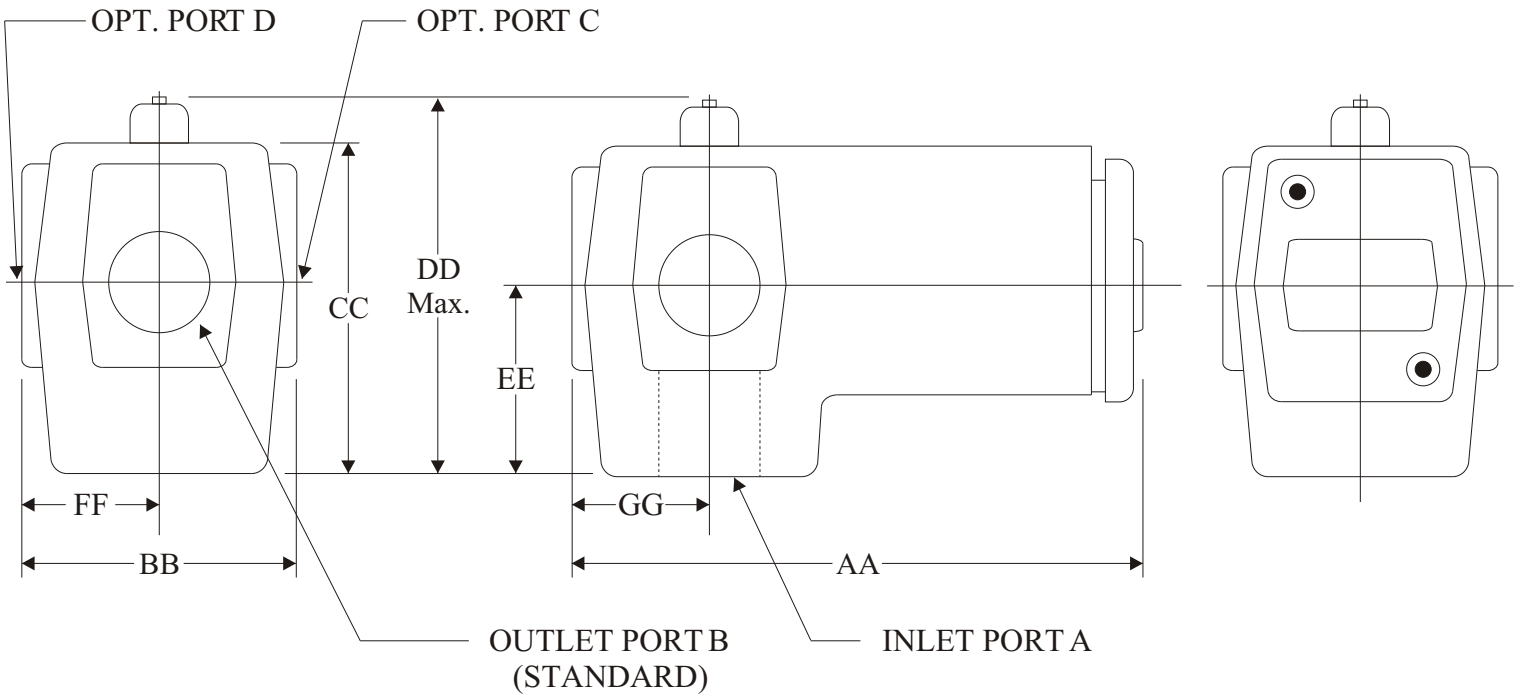
Features:

- 3 Different Outlet port locations allow for maximum flexibility in installation.
- Lightweight cast aluminum construction
- Cleanable, Re-Usable Dual-Stage filter element. This design allows for 4x the flow rate of a similarly sized single-stage element.
- Bypass located in the filter head to reduce possibility of contamination being pushed through the bypass.
- Vacuum indicator option to signal element capacity and to alert of impending bypass.
- 8 Different flow sizes available for maximum flexibility of selection and sizing.
- Optional Viton O-Rings for fluid compatibility
- Any combination of outlet ports B, C, and D allow for even greater system flexibility.

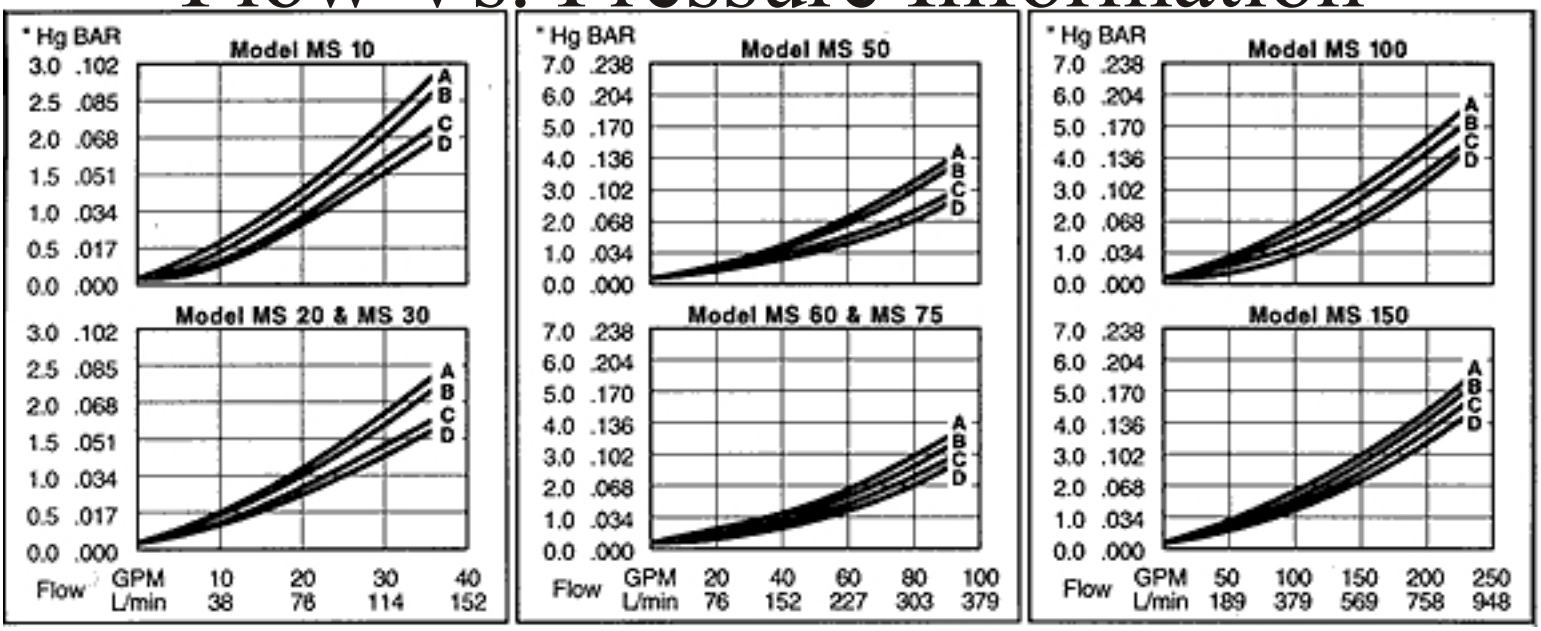
Dimensions and Specifications:

Model Series	Rated Flow GPM (Lpm)	Pipe Velocity Ft./sec. (M/sec.)	NPTF		SAE Code 61 Flange	Element Area in.^{2} (Cm^2)	Unit Wt. Lbs (Kg)	Dimensions - in. (mm)						
			Port A	Port B				AA	BB	CC	DD	EE	FF	GG
BSF10	5-10 (19-28)	1.9-3.8 (.58-1.16)	1-1/2”	1”	1”	130 (839)	10.25 (4.65)	11.00 (279)	4.29 (125)	5.65 (144)	6.50 (165)	3.34 (85)	2.46 (62)	2.18 (55)
BSF20	10-20 (38-76)	2.2-4.3 (.67-1.31)	1-1/2”	1-1/2”	1-1/2”	230 (1484)	10.5 (4.76)	11.00 (279)	4.29 (125)	5.65 (144)	6.50 (165)	3.34 (85)	2.46 (62)	2.18 (55)
BSF30	20-30 (76-114)	3.3-4.8 (1.01-1.46)	1-1/2”	1-1/2”	1-1/2”	260 (1677)	10.75 (4.87)	11.00 (279)	4.29 (125)	5.65 (144)	6.50 (165)	3.34 (85)	2.46 (62)	2.18 (55)
BSF50	30-50 (114-189)	2.9-4.8 (.88-1.46)	2”	2”	2-1/2”	370 (2387)	15.25 (6.91)	12.55 (319)	5.86 (149)	7.15 (182)	8.00 (203)	4.30 (109)	2.93 (74)	2.56 (65)
BSF60	40-60 (152-227)	2.7-4.1 (.82-1.25)	2-1/2”	2-1/2”	2-1/2”	450 (2903)	15.5 (7.03)	12.55 (319)	5.86 (149)	7.15 (182)	8.00 (203)	4.30 (109)	2.93 (74)	2.56 (65)
BSF75	50-75 (189-284)	3.4-5.0 (1.04-1.52)	2-1/2”	2-1/2”	2-1/2”	540 (3484)	15.75 (7.14)	12.55 (319)	5.86 (149)	7.15 (182)	8.00 (203)	4.30 (109)	2.93 (74)	2.56 (65)
BSF100	75-100 (284-379)	3.3-4.3 (1.01-1.31)	3”	3”	3-1/2”	720 (4645)	30 (13.61)	15.22 (386)	8.56 (217)	9.95 (253)	10.75 (273)	5.75 (146)	4.28 (109)	3.40 (86)
BSF150	100-150 (379-569)	3.3-4.9 (1.01-1.49)	3-1/2”	3-1/2”	3-1/2”	1000 (6452)	30.25 (13.72)	15.22 (386)	8.56 (217)	9.95 (253)	10.75 (273)	5.75 (146)	4.28 (109)	3.40 (86)

Specifications subject to change without notice.



Flow Vs. Pressure Information



Pressure Drop Calculation:

Average Pressure Drop is calculated with 225 SSU Fluid @ 70°F (21.0°C) with a specific gravity of 0.876.
A = 40 Micron, B = 74 Micron, C = 149 Micron, D = 262 Micron

Accessories

Manual-Reset Vacuum Indicator:

Privides advanced warning of excessive vacuum condition at the pump inlet, and notifies of impending bypass conditions.

Lock-Type

Description:

Red Alert Pop-Up Type Sleeve, visible from 360°.

Vibration and Shock Resistant

"Locking" Type - The red alert sleeve stays popped up even during system shutdown. Reset is Manual.

Automatic Reset Type - Indication is not held when system is shutdown, or if differential pressure is reduced. Good for cold starts.

Automatic-Reset

table 1 table 2 table 3

SVI__ - __ - __F

Vacuum Setting: table 1

5.5	5.5 Hg (for 3 psi bypass)
9.5	9.5 Hg (for 5 psi bypass)

Type: table 2

A	Automatic Reset (standard)
L	Lock-Type Vacuum

Seals: table 3

omit	Standard
V	Viton (optional)

17 Ridge Road, Branchville, NJ 07826 Tel: +1 (973) 948-0226 Fax: +1 (973) 948 2562
Web: http://www.behringersystems.com Email: cserv@behringersystems.com

Ordering Information

Table 1 Table 2 Table 3 Table 4 Table 5 Table 6 Table 7 Table 8

BSF __ / __ __ __ __ __ __ __ - __

Flow Rate

Table 1

10	10 GPM
20	20 GPM
30	30 GPM
50	50 GPM
60	60 GPM
75	75 GPM
100	100 GPM
150	150 GPM

Port Type

Table 2

T	NPT Female Thread
F	SAE Code 61 Flange

Port Size

Table 3

6	1”	(BSF10 Flange)
8	1-1/2”	(BSF20/30 Flange & BSF10/20/30 NPT)
9	2”	(BSF50 NPT)
10	2-1/2”	(BSF50/60/75 Flange and BSF60/75 NPT)
11	3”	(BSF100 NPT)
12	3-1/2”	(BSF100/150 Flange & BSF150 NPT)

Outlet Port

Table 4

B	Location B (standard)
C	Location C (optional)
D	Location D (optional)

Indicator

Table 5

A	Automatic Reset (standard)
L	Lock-Type Vacuum Indicator

Filtration

Table 6

40W	40 Micron wire (special order)
74W	74 Micron wire
149W	149 Micron wire
262W	262 Micron wire (special)

Bypass

Table 7

03	03 psid bypass valve
05	05 psid bypass valve

Seals

Table 8

Omit	Nitrile (Buna-N)
V	Fluorocarbon (Viton)

Replacement Elements

Table 1 Table 6

BSFE __ - __

BEHRINGER® Corporation
17 Ridge Road
Branchville, NJ 07826
Tel: +1 (973) 948-0226
Fax: +1 (973) 948-2562
web: www.behringersystems.com

Distributed By: