

Samos SB 0050 – 1400 D/D2



Samos SB 0530 D

Description

Busch Samos SB regenerative blowers are designed for either pressure or vacuum. They are available in single and two stage models so they can operate over a wide range of flow and differential pressure.

Low Maintenance and Environmentally Friendly

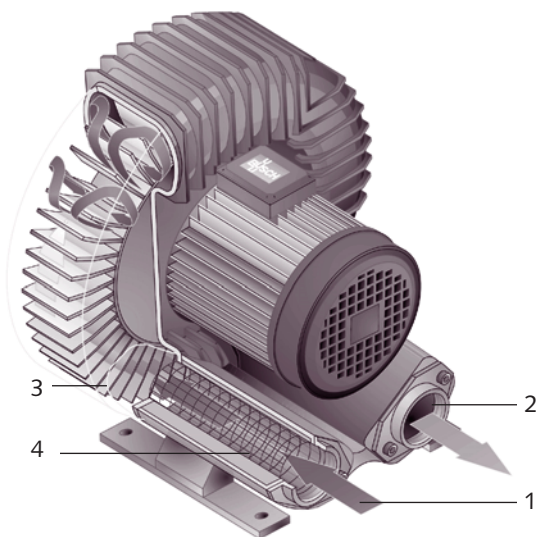
Samos low maintenance features include: rugged construction, sealed-for-life bearings, a fan cooled motor and a non-contacting impeller. They are oil-free, have a low power consumption, and are quiet due to internal silencers. Samos blowers can be installed in either a vertical or horizontal position.

Regenerative Blowers

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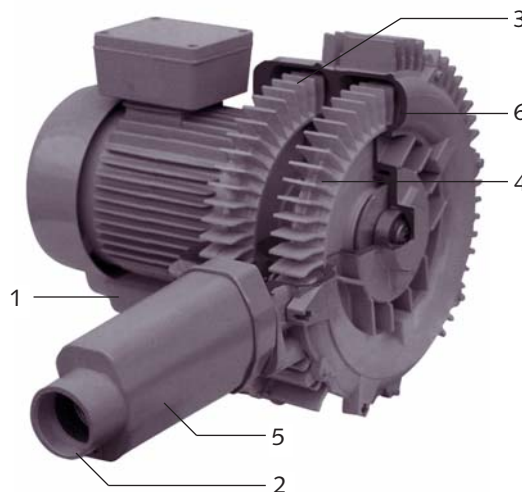
Operating Principle

Single-stage version



- 1. Gas Inlet
- 2. Gas outlet
- 3. Impeller
- 4. Silencer

Two-stage version



- 1. Gas inlet
- 2. Gas outlet
- 3. Impeller 1st stage
- 4. Impeller 2nd stage
- 5. Silencer
- 6. Side channel

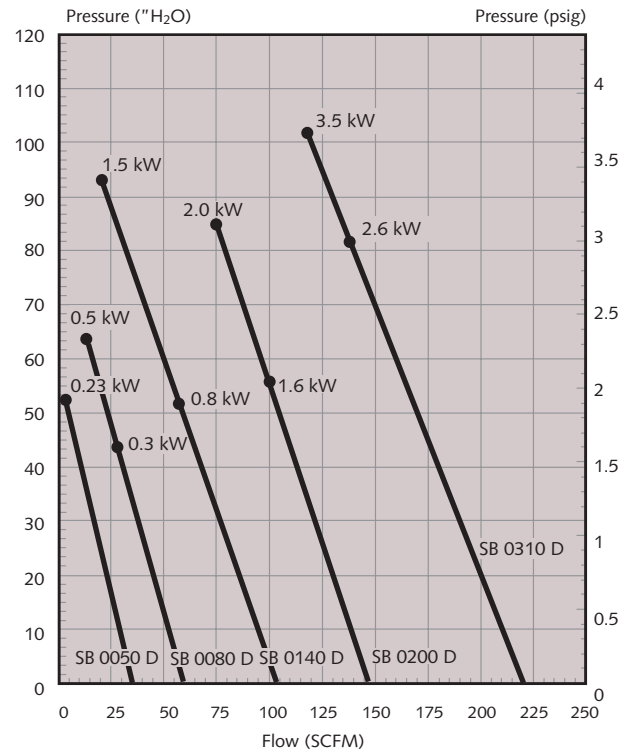
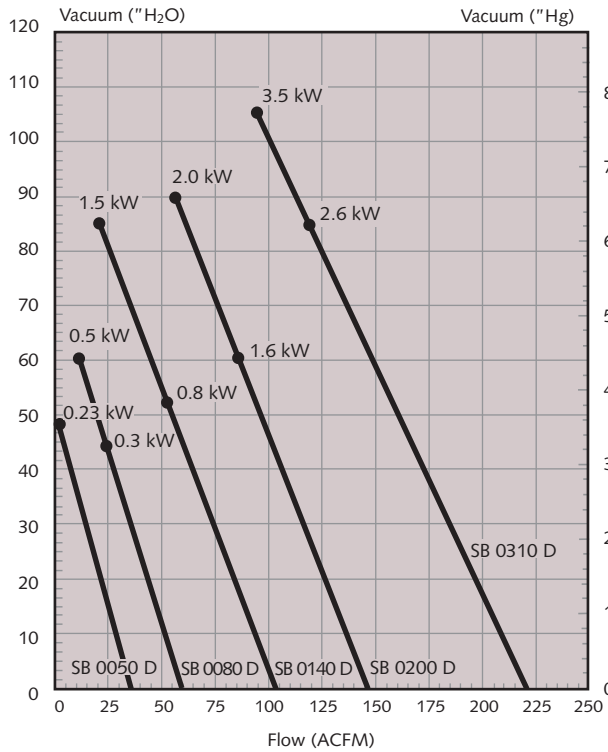
Operating Principle

Gases are drawn in through the blower inlet. As the impeller rotates, it transfers kinetic energy to the gases being pumped. As a result, the gases move forward through a corkscrew shaped path and are compressed, then discharged through the pressure side exhaust silencer. The impeller is mounted directly on the motor shaft.

Applications

- Pneumatic conveying
- Transport and lifting system
- Carton forming and packaging
- Vacuum holddown
- Materials handling
- Soil remediation
- Trim removal
- Wood routers
- Printing industry applications

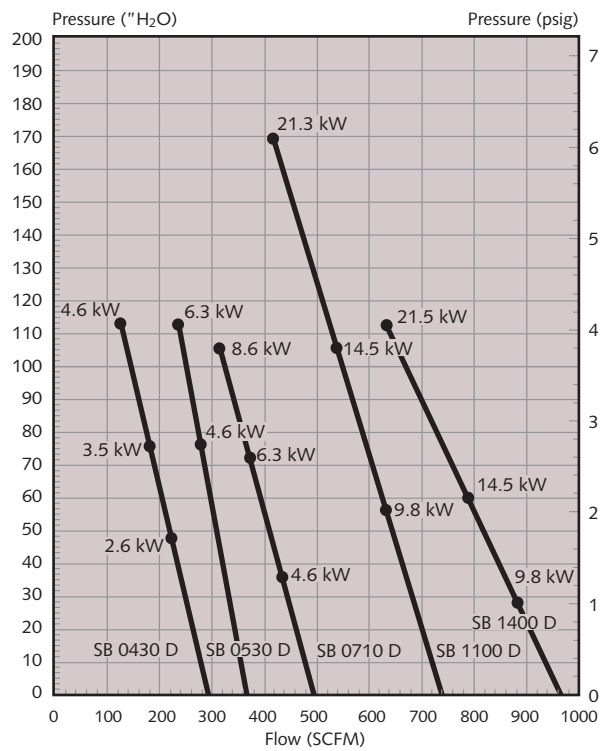
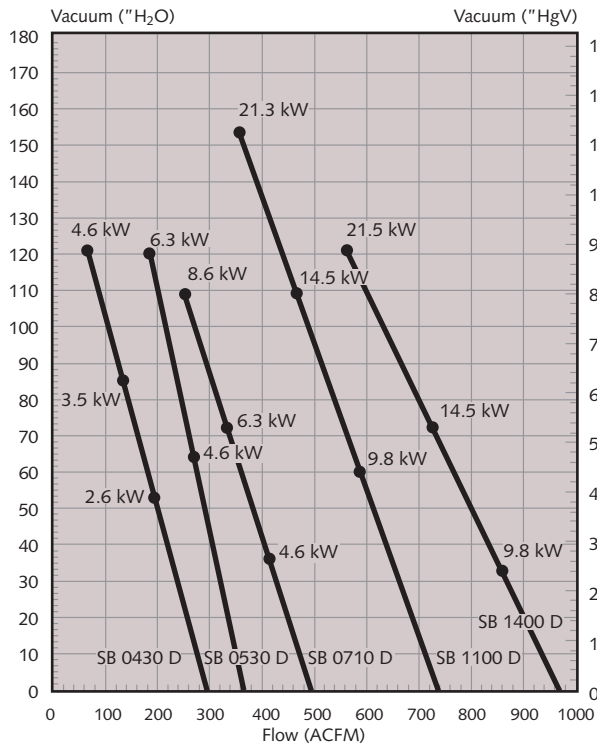
Technical Data Samos SB 0050 - 0310 D (single stage)



Technical Data Model	Nominal Pumping Speed ACFM	Max. Vacuum		Max Pressure		Motor (60 Hz)		RPM	Sound dB (A)	Weight lbs
		"H ₂ O	"Hg	"H ₂ O	psig	kW	Hp			
SB 0050 D	35	48	3.5	52	1.9	0.23	0.31	3450	53	15
SB 0080 D	59	44	3.2	44	1.6	0.3	.40	3450	56	18
SB 0080 D	59	60	4.4	64	2.3	0.5	.67	3450	56	22
SB 0140 D	103	52	3.8	52	1.9	0.8	1.1	3450	64	29
SB 0140 D	103	85	6.2	93	3.4	1.5	2.0	3450	64	33
SB 0200 D	147	60	4.4	56	2.0	1.5	2.0	3450	70	44
SB 0200 D	147	89	6.5	85	3.1	2.1	2.8	3450	70	46
SB 0310 D	221	85	6.2	81	2.9	2.6	3.5	3450	72	64
SB 0310 D	221	105	7.7	101	3.6	3.5	4.7	3450	72	68

Regenerative Blowers

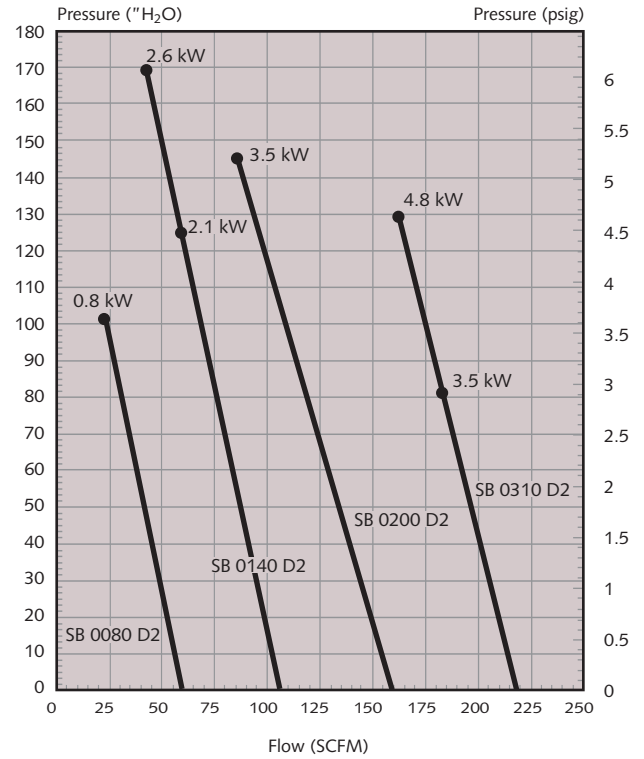
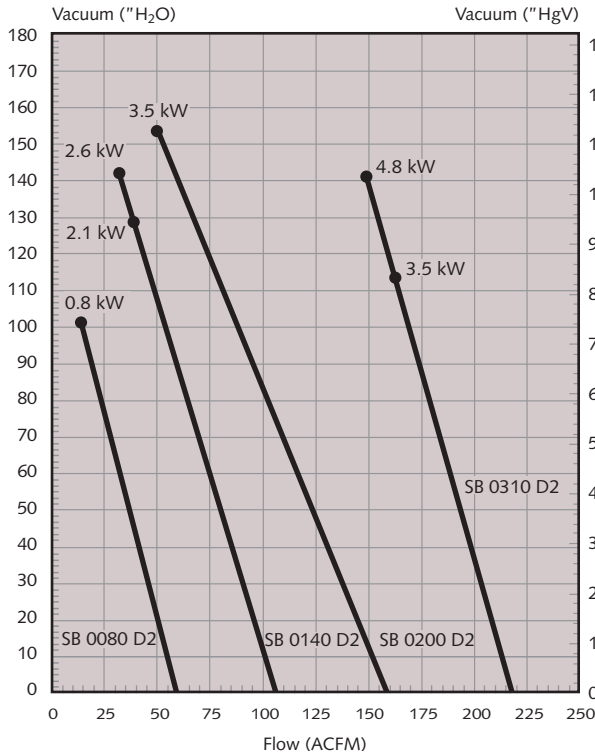
Technical Data Samos SB 0430 - 1400 D (single stage)



Technical Data

Model	Nominal Pumping Speed ACFM	Max. Vacuum		Max Pressure		Motor (60 Hz)			Sound dB (A)	Weight lbs
		"H ₂ O	"Hg	"H ₂ O	psig	kW	Hp	RPM		
SB 0430 D	294	52	3.8	48	1.7	2.6	3.5	3450	73	64
SB 0430 D	294	85	6.2	76	2.7	3.5	4.7	3450	73	75
SB 0430 D	294	121	8.9	113	4.1	4.6	6.2	3450	73	92
SB 0530 D	365	64	4.7	56	2.0	4.6	6.2	3450	74	246
SB 0530 D	365	121	8.9	113	4.1	6.3	8.4	3450	74	251
SB 0710 D	494	36	2.6	36	1.3	4.6	6.2	3450	74	246
SB 0710 D	494	72	5.3	72	2.6	6.3	8.4	3450	74	277
SB 0710 D	494	109	8.0	105	3.8	8.6	11.5	3450	74	282
SB 1100 D	736	60	4.4	56	2.0	9.8	13.1	3450	79	378
SB 1100 D	736	109	8.0	105	3.8	14.5	19.4	3450	79	420
SB 1100 D	736	153	11.2	169	6.1	21.3	28.6	3450	79	449
SB 1400 D	968	32	2.3	28	1.0	9.8	13.1	3450	80	383
SB 1400 D	968	72	5.3	64	2.3	14.5	19.4	3450	80	425
SB 1400 D	968	121	8.9	113	4.1	21.5	28.8	3450	80	453

Technical Data Samos SB 0080 - 0310 D2 (two stage)

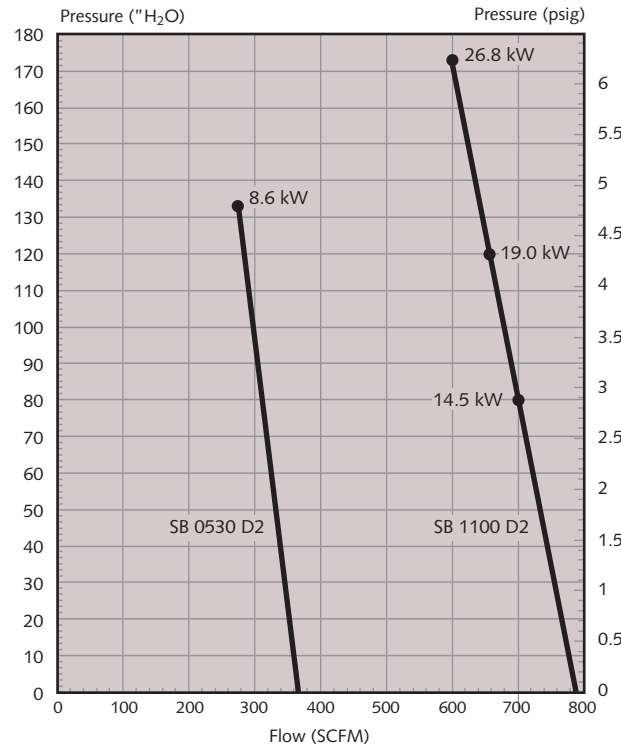
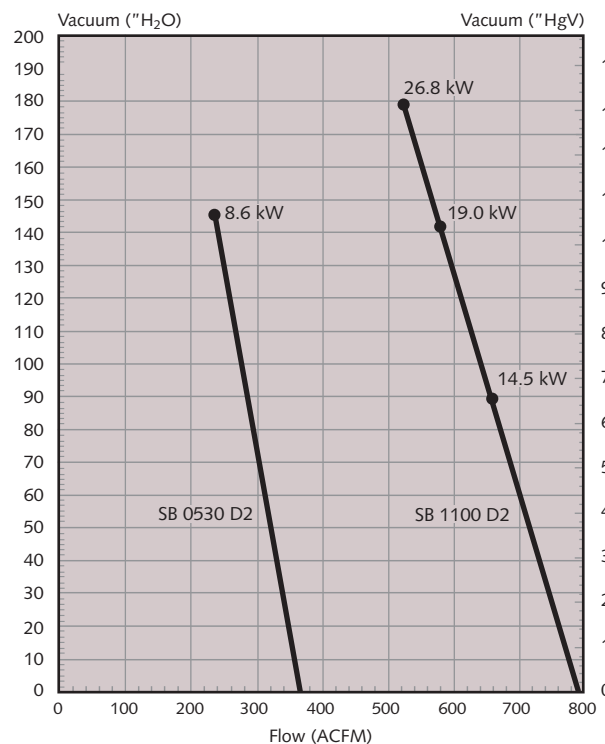


Technical Data Model	Nominal Pumping Speed ACFM	Max. Vacuum		Max Pressure		Motor (60 Hz)			Sound dB (A)	Weight lbs
		"H ₂ O	"Hg	"H ₂ O	psig	kW	Hp	RPM		
SB 0080 D2	59	101	7.4	101	3.6	0.8	1.1	3450	61	31
SB 0140 D2	106	129	9.5	125	4.5	2.1	2.8	3450	69	53
SB 0140 D2	106	141	10.3	169	6.1	2.6	3.5	3450	69	55
SB 0200 D2	159	153	11.2	145	5.2	3.5	4.7	3450	74	88
SB 0310 D2	218	93	6.8	81	2.9	3.5	4.7	3450	76	119
SB 0310 D2	218	141	10.3	129	4.6	4.8	6.4	3450	76	119

Regenerative Blowers

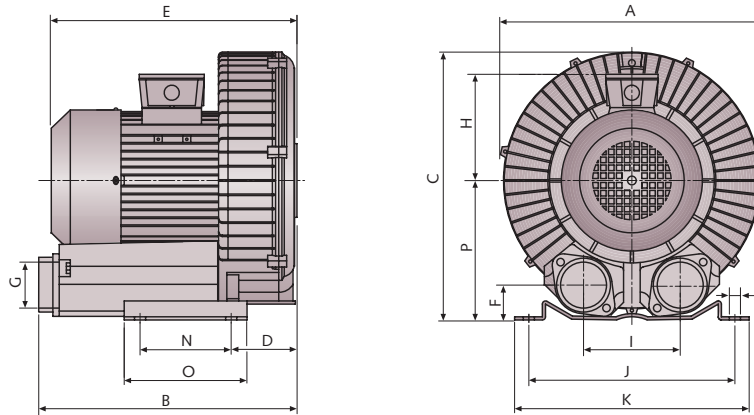
Technical Data Samos SB 0530 - 1100 D2 (two stage)

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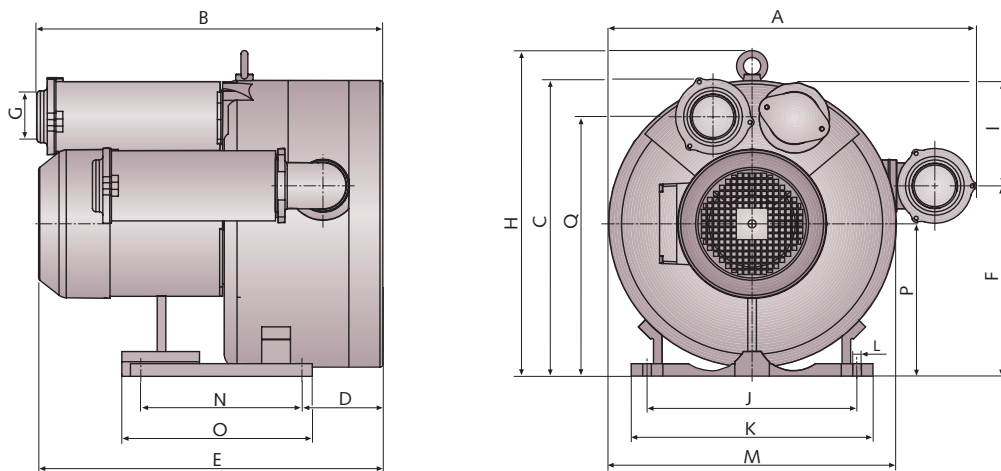
Technical Data		Nominal Pumping Speed	Max. Vacuum	Max Pressure	Motor (60 Hz)	Sound	Weight
Model		ACFM	"H ₂ O "Hg	"H ₂ O psig	kW Hp	dB (A)	lbs
SB 0530 D2		365	145 10.6	133 4.8	8.6 11.5	78	372
SB 1100 D2		789	89 6.5	81 2.9	14.5 19.4	79	583
SB 1100 D2		789	141 10.3	121 4.4	19 25.5	79	612
SB 1100 D2		789	179 13.1	173 6.2	23 30.8	79	682

Dimensions Samos SB 0050 - 1400 D (single stage)



Model	A	B	C	D	E	F	G (NPT)	H	I	J	K	L	N	O	P
SB 0050 D	9 ³ / ₄	9 ¹ / ₁₆	9 ¹³ / ₁₆	2 ¹³ / ₁₆	10 ³ / ₁₆	1 ⁹ / ₁₆	1 ¹ / ₄	4 ³ / ₈	3 ⁹ / ₁₆	8 ¹ / ₁₆	9 ¹ / ₁₆	³ / ₈	3 ¹ / ₄	4 ¹ / ₄	5 ¹ / ₈
SB 0080 D	9 ³ / ₄	9 ¹ / ₁₆	9 ¹³ / ₁₆	2 ¹³ / ₁₆	10 ³ / ₁₆	1 ⁹ / ₁₆	1 ¹ / ₄	4 ³ / ₈	3 ⁹ / ₁₆	8 ¹ / ₁₆	9 ¹ / ₁₆	³ / ₈	3 ¹ / ₄	4 ¹ / ₄	5 ¹ / ₈
SB 0140 D	11 ⁵ / ₁₆	9 ¹ / ₂	12	3	10 ¹¹ / ₁₆	1 ¹³ / ₁₆	1 ¹ / ₂	5 ³ / ₁₆	4 ¹ / ₂	8 ⁷ / ₈	10 ¹ / ₁₆	¹ / ₂	3 ³ / ₄	5 ¹ / ₈	6 ¹ / ₈
SB 0200 D	13 ¹ / ₄	11 ³ / ₄	13 ³ / ₈	3 ⁷ / ₁₆	12 ¹ / ₂	1 ⁷ / ₈	2	6 ¹ / ₄	4 ³ / ₄	10 ¹ / ₄	11 ⁵ / ₈	⁹ / ₁₆	4 ¹ / ₂	6 ¹ / ₈	6 ¹⁵ / ₁₆
SB 0310 D	15 ¹ / ₁₆	13 ¹ / ₈	15 ³ / ₁₆	4 ⁵ / ₁₆	14 ¹⁵ / ₁₆	2 ¹ / ₈	2	7 ³ / ₁₆	4 ¹⁵ / ₁₆	11 ⁷ / ₁₆	12 ¹³ / ₁₆	⁹ / ₁₆	5 ¹ / ₂	7 ¹ / ₁₆	7 ⁷ / ₈
SB 0430 D	14 ⁷ / ₈	14 ³ / ₁₆	15 ³ / ₁₆	3 ⁷ / ₈	17 ⁹ / ₁₆	2 ¹ / ₈	2	5 ¹³ / ₁₆	4 ¹⁵ / ₁₆	11 ⁷ / ₁₆	12 ¹³ / ₁₆	⁹ / ₁₆	5 ¹ / ₂	7 ¹ / ₁₆	7 ⁷ / ₈
SB 0530 D	19 ¹¹ / ₁₆	19 ¹ / ₂	20 ⁵ / ₁₆	1 ³ / ₈	18 ⁵ / ₈	3 ³ / ₁₆	2 ¹ / ₂	NA	5 ¹¹ / ₁₆	14 ³ / ₈	16 ⁹ / ₁₆	⁹ / ₁₆	11	12 ⁷ / ₁₆	10 ¹ / ₂
SB 0710 D	19 ¹¹ / ₁₆	19 ¹ / ₂	20 ⁵ / ₁₆	¹¹ / ₁₆	19 ⁷ / ₁₆	3 ³ / ₁₆	2 ¹ / ₂	NA	5 ¹¹ / ₁₆	14 ³ / ₈	16 ⁹ / ₁₆	⁹ / ₁₆	11	12 ⁷ / ₁₆	10 ¹ / ₂
SB 1100 D	21 ¹⁵ / ₁₆	28 ⁵ / ₈	24 ⁷ / ₈	4 ¹ / ₄	24 ¹⁵ / ₁₆	3 ⁹ / ₁₆	4	NA	8 ¹ / ₈	14 ³ / ₁₆	16 ⁵ / ₁₆	⁹ / ₁₆	23 ⁷ / ₁₆	NA	11 ⁷ / ₈
SB 1400 D	21	24 ¹³ / ₁₆	22 ³ / ₈	4 ¹ / ₄	27 ¹¹ / ₁₆	3 ⁹ / ₁₆	4	7 ³ / ₄	8 ¹ / ₈	14 ³ / ₁₆	16	⁹ / ₁₆	23 ⁷ / ₁₆	NA	11 ⁷ / ₈

Dimensions Samos SB 0530 D2 (two stage)

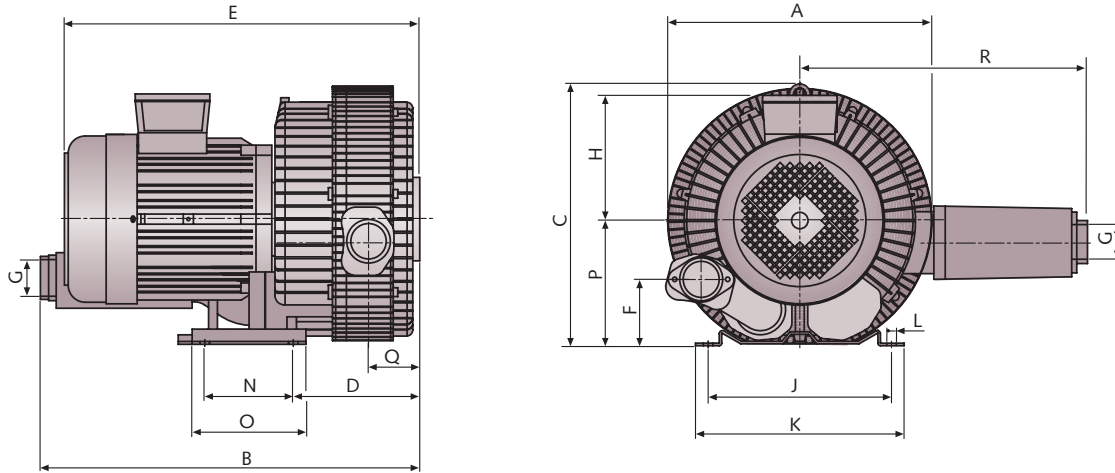


Model	A	B	C	D	E	F	G (NPT)	H	I	J	K	L	M	N	O	P	Q
SB 0530 D2	25 ¹ / ₈	23 ³ / ₄	20 ⁵ / ₁₆	5 ⁹ / ₁₆	23 ¹¹ / ₁₆	13 ¹ / ₈	2 ¹ / ₂	22 ³ / ₈	7 ³ / ₁₆	14 ³ / ₈	16 ⁹ / ₁₆	⁹ / ₁₆	19 ¹ / ₁₆	11	12 ⁷ / ₁₆	10 ¹ / ₂	17 ¹⁵ / ₁₆

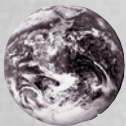
All dimensions in inches unless otherwise noted.

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Dimensions Samos SB 0080 - 1100 D2 (two stage)



Model	A	B	C	D	E	F	G (NPT)	H	J	K	L	N	O	P	Q	R
SB 0080 D2	11 ¹ / ₄	11 ³ / ₈	10 ³ / ₄	5 ³ / ₁₆	12 ⁹ / ₁₆	1 ⁹ / ₁₆	1 ¹ / ₄	4 ³ / ₈	8 ¹ / ₁₆	9 ¹ / ₁₆	³ / ₈	3 ¹ / ₄	4 ¹ / ₄	5 ¹ / ₈	1 ³ / ₁₆	12 ¹ / ₂
SB 0140 D2	12 ¹¹ / ₁₆	12 ¹ / ₂	12 ¹ / ₂	6	15 ⁷ / ₈	1 ¹³ / ₁₆	1 ¹ / ₂	5 ¹ / ₁₆	8 ⁷ / ₈	10 ¹ / ₁₆	¹ / ₂	3 ³ / ₄	5 ¹ / ₈	6 ¹ / ₈	1 ¹³ / ₁₆	12 ¹¹ / ₁₆
SB 0200 D2	14 ⁵ / ₈	15 ¹ / ₈	14 ³ / ₄	5 ⁵ / ₁₆	18 ⁷ / ₁₆	1 ⁷ / ₈	2	5 ⁵ / ₁₆	10 ¹ / ₄	11 ⁵ / ₈	⁹ / ₁₆	4 ¹ / ₂	6 ¹ / ₈	6 ¹⁵ / ₁₆	2 ³ / ₁₆	16 ¹ / ₄
SB 0310 D2	16 ⁷ / ₈	17 ¹ / ₂	16 ⁵ / ₈	8 ¹ / ₁₆	20 ¹¹ / ₁₆	2 ¹ / ₈	2	5 ¹ / ₁₆	11 ⁷ / ₁₆	12 ¹³ / ₁₆	⁹ / ₁₆	5 ¹ / ₂	7 ¹ / ₁₆	7 ⁷ / ₈	2 ⁷ / ₈	17 ⁷ / ₁₆
SB 1100 D2	22 ¹ / ₁₆	32 ⁷ / ₈	22 ¹ / ₂	9 ¹ / ₂	30 ³ / ₁₆	3 ⁹ / ₁₆	4	13 ¹ / ₈	14 ³ / ₁₆	16 ⁵ / ₁₆	⁹ / ₁₆	23 ⁷ / ₁₆	NA	11 ⁷ / ₈	5 ¹³ / ₁₆	32 ³ / ₈



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Busch, Inc. 516 Viking Drive Virginia Beach, VA 23452
 Phone (757) 463-7800 FAX (757) 463-7407

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