

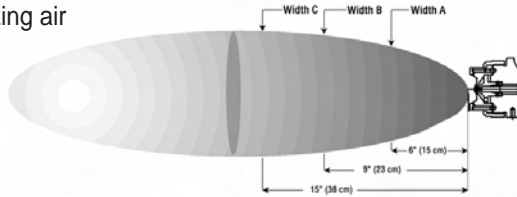
# SAM™



## External Mix/Flat Fan or Narrow Round

### DESIGN FEATURES

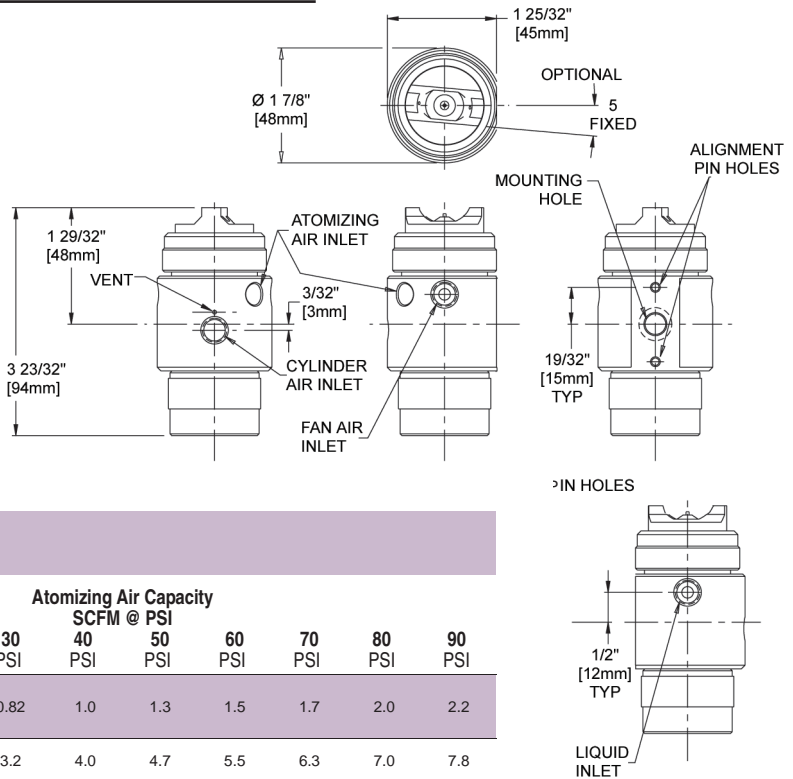
- Separate atomizing and fan air lines provide variable coverage and fine control of drop size without affecting liquid flow rates. Higher atomizing air pressure yields finer drop size; higher fan air pressure yields broader patterns
- External mix; allows spraying of viscous materials
- Liquid flow rates are independent of air
- Precise metering of the liquid flow rate



### SAM

#### Liquid Flow Rates

Pipe Size	Spray Set-Up No.	Fluid Cap and Air Cap No.	Liquid Capacity GPH @ PSI				
			3 PSI	5 PSI	10 PSI	15 PSI	20 PSI
1/8"	SAM-01-02	FCS 01 & ACS 02	0.7	1.0	1.4	1.7	1.9
	SAM-02-02	FCS 02 & ACS 02	1.1	1.5	2.1	2.5	2.9
	SAM-03-02	FCS 03 & ACS 02	2.2	2.8	4.0	4.9	5.6
	SAM-04-03	FCS 04 & ACS 03	3.6	4.7	6.6	8.0	9.4
	SAM-05-03	FCS 05 & ACS 03	4.9	6.4	9.0	11.0	12.8
	SAM-06-04	FCS 06 & ACS 04	10.0	13.0	18.4	23	26
	SAM-07-05	FCS 07 & ACS 05	18.3	24	33	41	47



### SAM

#### Air Flow Rates

Pipe Size	Spray Set-Up No.	Fluid Cap and Air Cap No.	Atomizing Air Capacity SCFM @ PSI									
			10 PSI	15 PSI	20 PSI	30 PSI	40 PSI	50 PSI	60 PSI	70 PSI	80 PSI	90 PSI
1/8"	SAM-01-02	FCS 01 & ACS 02	0.44	0.53	0.62	0.82	1.0	1.3	1.5	1.7	2.0	2.2
	SAM-02-02	FCS 02 & ACS 02										
	SAM-03-02	FCS 03 & ACS 02										
	SAM-04-03	FCS 04 & ACS 03	1.6	2.0	2.4	3.2	4.0	4.7	5.5	6.3	7.0	7.8
	SAM-05-03	FCS 05 & ACS 03	1.6	2.0	2.4	3.1	3.9	4.7	5.4	6.2	7.0	7.8
	SAM-06-04	FCS 06 & ACS 04	1.8	2.2	2.6	3.6	4.4	5.3	6.2	7.0	7.8	8.6
	SAM-07-05	FCS 07 & ACS 05	1.8	2.2	2.6	3.6	4.4	5.3	6.2	7.0	7.8	8.6

Pipe Size	Spray Set-Up No.	Fluid Cap and Air Cap No.	Fan Air Capacity SCFM @ PSI									
			10 PSI	15 PSI	20 PSI	30 PSI	40 PSI	50 PSI	60 PSI	70 PSI	80 PSI	90 PSI
1/8"	SAM-01-02	FCS 01 & ACS 02	2.2	2.7	3.3	4.4	5.5	6.6	7.6	8.6	9.6	10.6
	SAM-02-02	FCS 02 & ACS 02										
	SAM-03-02	FCS 03 & ACS 02										
	SAM-04-03	FCS 04 & ACS 03	3.5	4.4	5.4	7.2	8.9	10.6	12.3	14.0	15.5	17.2
	SAM-05-03	FCS 05 & ACS 03	3.9	4.9	6.0	8.1	10.2	12.3	14.3	16.3	18.2	20
	SAM-06-04	FCS 06 & ACS 04	3.9	4.8	5.8	7.8	9.8	11.7	13.6	15.4	17.2	18.8
	SAM-07-05	FCS 07 & ACS 05	3.9	4.8	5.8	7.8	9.8	11.7	13.6	15.4	17.2	18.8

Standard Materials: 303 Stainless Steel, Blue-gard® gasket, Viton® O-rings

**Note:** Spray set-ups consist of fluid and air caps. Set-ups are interchangeable but each uses a different needle size.

Replacement air caps include replacement Blue-Gard® gaskets.

Spray angle performance varies with pressure. Contact BETE for specific data on critical applications.

AIR ATOMIZING

TO ORDER: specify pipe size, spray set-up #, hardware and material.

Dimensions are approximate. Check with BETE for critical dimension applications.

**SAM Coverage Chart**

Variable Spray, Pressure Fed, Flat Fan or \*Narrow Round Spray Pattern

Pipe Size	Spray Set-up No.	Fluid Cap and Air Cap No.	Spray Dimensions with Varied Fan Air Pressure														
			PSI air	PSI liquid	0° PSI			10 PSI			40 PSI			60 PSI			
					A in.	B in.	C in.	A in.	B in.	C in.	A in.	B in.	C in.	A in.	B in.	C in.	
1/8	SAM-01-02	FCS 01 & ACS 02	10	3 10 20	2 2.5 2	3 3.5 3	4 4.5 4	7 7.5 8	9 10 12	10 12 14	6 7 9	8 8 11	11 11 14	6 7 8	8 8 10	11 12 13	
			30	3 10 20	2 2 2	3 2.5 3	4.5 5 4	5 6 7	6 7.5 9	7 10 13	8 8 10	10 10 12	14 13 15	8 8 9.5	11 10 11.5	14 12 14.5	
			40	3 10 20	2.5 2 2	3.5 3 3	6 5 4.5	5 6 7	6 7 8	8 10 12	8 9 10	10 11 12	14 14 14	9 9 10	11 11 12	14 13 15	
			60	3 10 20	2.5 2 2	3.5 3 3	6 5 4.5	4 4.5 5	5 5 7	6 6 9	8 8 9	11 10 12	13 14 16	9 9 10	11 12 13	14 15 17	
	SAM-02-02	FCS 02 & ACS 02	10	3 10 20	2 2 2	3 3 3	4 4.5 4	8 8 8	10 12 15	12 15 15	6.5 9	8.5 14	11 18	6 7 8	9 10 10	12 13	
			30	3 10 20	2 2 2	3 3 3	4.5 5 4	5.5 7 7	7 9 10	8 12 12	8 10 13	10 12 16	14 14 18	8 9 9.5	11 10 11.5	14 13 14.5	
			40	3 10 20	2.5 2 2	3.5 3 3	6 5 4.5	5 7 6.5	7 8 9	9 12.5 12.5	8 9.5 11.5	10 12 15	14 14 17	9 11 11	11 12 14	14 15 18	
			60	3 10 20	2.5 2 2	3.5 4 3	6 5.5 4.5	4.5 5 5.5	5.5 6 7.5	7 8.5 9.5	8 9 10	10.5 11 14	13 14 18	9 10 11	11 12 14	14 15 18	
	SAM-03-02	FCS 03 & ACS 02	10	3 10 20	2 2 2	3 2.5 3	5 4 4	9 12 15	15 21 21	7 12 16	20 20	23	7 9 11	9 10 11	12 13		
			30	3 10 20	2.5 2 2	3 3 2.5	4.5 5 4	6 8 8	8 11 12	9 15 14	8 11 16	10 13 20	13 13 22	8 10 11	10 11 13		
			40	3 10 20	2.5 2 2	3.5 3 3	5 5 5	5 7 7	7 8 9	10 11 13.5	8 11 13	10 13 18	13 15 21	8 10 12	11 12 17	13 13 21	
			60	3 10 20	2.5 2 2	3.5 3 3	5.5 5.5 4.5	5 6 6	6 7 8	8 9.5 10	8 10 12	10 13 18	13 16 22	8 11 13	10 13 18	13 15 21	
SAM-04-03	FCS 04 & ACS 03	10	3 10 20	2.5 2 2	3.5 3 3	5 4.5	9 10 9	13 14 13	17 16 17	18 24 29							
		30	3 10 20	2.5 2.5 2.5	3 3.5 3.5	5 5 5.5	4 5 5	5 6 9	7 9 13	11 13 20	15 17 24	18 22 24	12 18 17	15 21 22	18 26 27		
		40	3 10 20	2.5 2.5 2.5	3 3.5 3.5	5 5 5	3.5 4 4	4.5 5 8	6.5 7 11	9 10 15	12 14 21	14 18 21	11 15 16	13 18 20	18 22 25		
		60	3 10 20	2.5 2.5 2.5	3.5 3.5 3.5	5 4.5 4.5	3 3 3	4 4.5 7	6 8 10	8 11 12	10 12 16	13 14 16	10 11 12	12 15 17	17 18 22		
SAM-05-03	FCS 05 & ACS 03	10	3 10 20	3 3 3	4 4 4	6 6 6	9 8 9	12 11 12	18 15 15	24 29 21	29 35						
		30	3 10 20	2.5 2.5 2	3.5 3.5 3	6 5 5	4 4.5 4.5	6 6 9	8 8 9	12 14 15	15 18 19	19 23 27	12 17 18	15 22 23	19 25 27		
		40	3 10 20	2.5 2.5 2.5	3.5 3.5 3.5	6 5.5 5.5	3.5 4 3.5	5 6 5	7 8 9	10 12 13	13 16 17	17 20 22	12 15 16	14 18 20	18 22 24		
		60	3 10 20	2.5 2.5 2.5	3.5 3.5 3.5	6 5.5 5.5	2.5 3 3	4 4 6	7 8 9	9 10 13	11 13 17	14 16 17	10 12 12	12 16 17	17 20 23		
SAM-06-04	FCS 06 & ACS 04	10	3 10 20	3 3 3	4 4 4	5 5 5	7 4 4	10 6 6	13 8 8.5	21 12 13	26 14 16	33 21 22	22 15 16	27 19 21	34 22 23		
		30	3 10 20	3 2.5 2.5	4 3.5 3.5	5 5 5	4 4 5	6 5 8	8 7 9	11 14 13	16 20 17	21 24 21	18 18 13	18 21 18	24 25 26		
		40	3 10 20	3 2.5 2.5	4 3.5 3.5	5.5 5 5	3.5 4 3	5 5 5	7 7 8	10 11 9	12 14 13	17 20 17	12 14 13	17 18 18	21 25 26		
		60	3 10 20	3 3 3	4 4 3.5	6 5 5	3 3.5 3	4 4 4	6 7 5.5	8 9 8	10 12 10	13 16 15	10 12 12	13 16 16	18 21 21		
SAM-07-05	FCS 07 & ACS 05	10	3 10 20	3 3 3	4 4 4	5 5 5	8 5 6	11 6.5 7	15 9 10	21 13 14	27 18 17	35 23 24					
		30	3 10 20	3 3 3	4 4 3.5	5 5 5	5 5.5 4.5	6 6 7	9 7 7.5	11 12 12	15 15 14	19 20 21	17 16 14	24 20 19	30 29 27		
		40	3 10 20	3 3 3	4 4 3.5	5.5 5 5	5.5 4.5 3.5	6 7 6	9 7 7.5	11 12 12	15 15 14	19 20 21	17 16 14	24 20 19	30 29 27		
		60	3 10 20	3 3 2.5	4 4 3	6 6.5 5	4 5 3.5	6 6.5 4.5	8 7.5 6	9 10 6	11 13 7	15 17 14	19 17 15	17 13 12	24 23 16	30 29 24	

Spray angle performance varies with pressure. Contact BETE for specific data on critical applications.