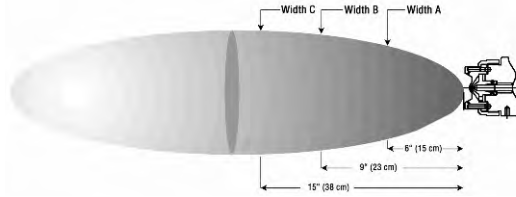


SAM

External Mix/Flat Fan or Narrow Round

DESIGN FEATURES

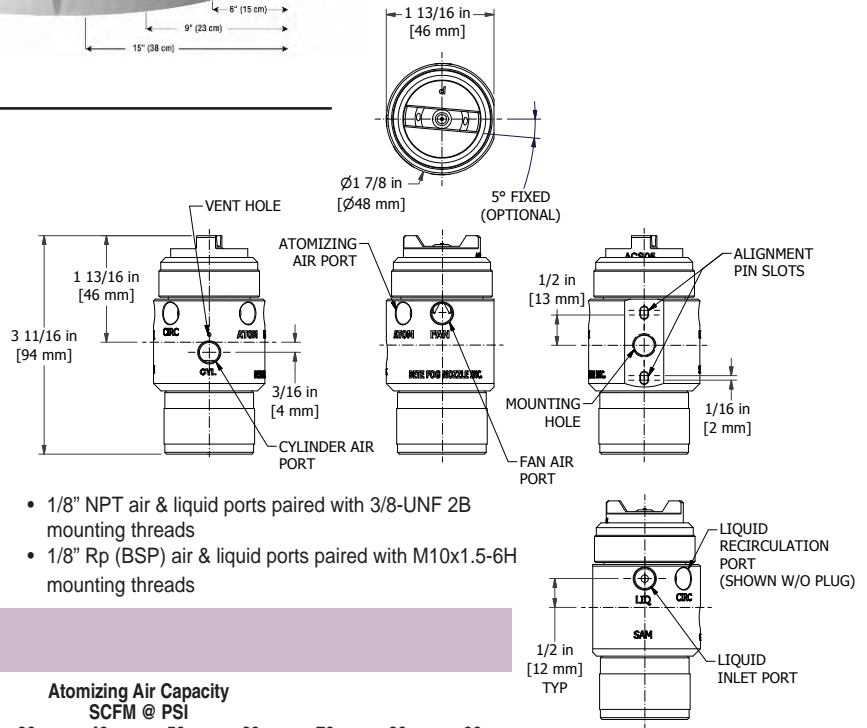
- Separate atomizing and fan air lines provide variable coverage and fine control of drop size without affecting liquid flow rates. Higher atomizing air pressure yields finer drop size; higher fan air pressure yields broader patterns
- Pneumatically-controlled shut-off and clean-out built in
- External mix; allows spraying of viscous materials
- Liquid flow rates are independent of air
- Precise metering of the liquid flow rate
- Removable plug provided for liquid recirculation port



AIR ATOMIZING

SAM Liquid Flow Rates

Pipe Size	Spray Set-up Number	Fluid Cap and Air Cap Number	Liquid Capacity GPH @ PSI				
			3 PSI	5 PSI	10 PSI	15 PSI	20 PSI
1/8	SAM-01-02	FCS 01 & ACS 02	0.70	1.00	1.40	1.70	1.90
	SAM-02-02	FCS 02 & ACS 02	1.10	1.50	2.10	2.50	2.90
	SAM-03-02	FCS 03 & ACT 02	2.20	2.80	4.00	4.90	5.60
	SAM-04-03	FCS 04 & ACS 03	3.60	4.70	6.60	8.00	9.40
	SAM-05-03	FCS 05 & ACS 03	4.90	6.40	9.00	11.0	12.8
	SAM-06-04	FCS 06 & ACS 04	10.0	13.0	18.4	23.0	26.0
	SAM-07-05	FCS 07 & ACS 05	18.3	24.0	33.0	41.0	47.0



- 1/8" NPT air & liquid ports paired with 3/8-UNF 2B mounting threads
- 1/8" Rp (BSP) air & liquid ports paired with M10x1.5-6H mounting threads

SAM Air Flow Rates

Pipe Size	Spray Set-up Number	Fluid Cap and Air Cap Number	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	1.00	1.30	1.50	1.70	2.00	2.20
	SAM-02-02	FCS 02 & ACS 02										
	SAM-03-02	FCS 03 & ACS 02										
	SAM-04-03	FCS 04 & ACS 03	1.60	2.00	2.40	3.20	4.00	4.70	5.50	6.30	7.00	7.80
	SAM-05-03	FCS 05 & ACS 03	1.60	2.00	2.40	3.10	3.90	4.70	5.40	6.20	7.00	7.80
	SAM-06-04	FCS 06 & ACS 04										
	SAM-07-05	FCS 07 & ACS 05	1.80	2.20	2.60	3.60	4.40	5.30	6.20	7.00	7.80	8.60

Pipe Size	Spray Set-up Number	Fluid Cap and Air Cap Number	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	2.20	2.70	3.30	4.40	5.50	6.60	7.60	8.60	9.60	10.6
	SAM-02-02	FCS 02 & ACS 02										
	SAM-03-02	FCS 03 & ACS 02										
	SAM-04-03	FCS 04 & ACS 03	3.50	4.40	5.40	7.20	8.90	10.6	12.3	14.0	15.5	17.2
	SAM-05-03	FCS 05 & ACS 03	3.90	4.90	6.00	8.10	10.2	12.3	14.3	16.3	18.2	20.0
	SAM-06-04	FCS 06 & ACS 04										
	SAM-07-05	FCS 07 & ACS 05	3.90	4.80	5.80	7.80	9.80	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 clean-out/shut-off needle uses a different needle size.

Pneumatically-Controlled Clean-out/ Shutoff. Removal of air pressure to the cylinder causes a spring loaded poppet valve actuator to shut off liquid flow and extends a clean-out needle through the nozzle orifice.

Replacement air caps include replacement Blue-Gard® gaskets.

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

TO ORDER: specify pipe size, body style, spray set-up #, hardware and mounting assemblies, 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 Number	Fluid Cap and Air Cap Number	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	2	3	4	7	9	10	6	8	11	6	8	11	10	2.5	3.5	4.5	7.5	10	12	7	8	11	7	8	12	20	2	3	4	8	12	14	9	11	14	8	10	13					
				30	3	2	3	4.5	5	6	7	8	10	14	8	11	14	8	11	14	10	2	2.5	5	6	7.5	10	8	10	13	8	10	12	20	2	3	4	7	9	13	10	12	15	9.5	11.5	14.5	
					40	3	2.5	3.5	6	5	6	8	8	10	14	9	11	14	9	11	14	10	2	3	5	6	7	10	9	11	14	9	11	13	20	2	3	4.5	7	8	12	10	12	14	10	12	15
			60			3	2.5	3.5	6	4	5	6	8	11	13	9	11	14	9	11	14	10	2	3	5	4.5	5	7	8	10	14	9	12	15	20	2	3	4.5	5	7	9	9	12	16	10	13	17
				SAM-02-02		FCS 02 & ACS 02	10	3	2	3	4	8	10	12	6.5	8.5	11	6	9	12	10	2.5	3.5	4.5	8	12	15	9	14	18	7	10	13	20	2	3	4	8	12	15	8	12	16	8	10	13	
					30			3	2	3	4.5	5.5	7	8	8	10	14	8	11	14	10	2	3	5	7	9	12	10	12	14	9	10	13	20	2	3	4	7	10	12	13	16	18	9.5	11.5	14.5	
			40					3	2.5	3.5	6	5	7	9	8	10	14	9	11	14	10	2	3	5	7	8	9.5	12	14	9	12	15	20	2	3	4.5	6.5	9	12.5	11.5	15	17	11	14	18		
							60	3	2.5	3.5	6	4.5	5.5	7	8	10.5	13	9	11	14	10	2.5	4	5.5	5	6	8.5	9	11	14	10	12	15	20	2	3	4.5	5.5	7.5	9.5	10	14	18	11	14	18	
					SAM-03-02			FCS 03 & ACS 02	10	3	2	3	5	9	12	15	7	9	11	7	9	12	10	2	2.5	4	12	15	21	12	20	23	7	9	12	20	2	3	4	10	12	16	8	10	14	13	18
			30							3	2.5	3	4.5	6	8	9	8	10	13	8	10	13	10	2	3	5	8	11	15	11	13	13	10	11	13	20	2	2.5	4	8	12	14	16	20	22	8	10
							40			3	2.5	3.5	5	5	7	10	8	10	13	8	11	13	10	2	3	5	7	8	11	13	15	10	12	13	20	2	3	5	7	9	13.5	13	18	21	12	17	21
									60	3	2.5	3.5	5.5	5	6	8	8	10	13	8	10	13	10	2.5	3.5	5.5	6	7	9.5	10	13	16	11	13	15	20	2	3	4.5	6	8	10	12	18	22	13	18
	SAM-04-03	FCS 04 & ACS 03	10							3	2.5	3.5	5	9	13	17							10	2	3	4.5	10	14	17							20	2	3	4.5	9	13	17	18	24	29		
							30			3	2.5	3	5	4	5	7	11	15	18	12	15	18	10	2.5	3.5	5	5	7	9	13	17	22	18	21	26	20	2.5	3.5	5.5	5	6	9	13	20	24	17	22
									40	3	2.5	3	5	3.5	4.5	6.5	9	12	14	11	13	14	10	2.5	3.5	5	4	5	7	10	14	18	15	18	22	20	2.5	3.5	5	4	5.5	8	11	15	21	16	20
			60							3	2.5	3.5	5	3	4	6	8	10	13	10	12	17	10	2.5	3.5	4.5	3	4	6	8	11	14	11	15	18	20	2.5	3.5	4.5	3	4.5	7	10	12	16	12	17
				SAM-05-03		FCS 05 & ACS 03	10			3	3	4	6	9	12	18							10	3	4	6	8	11	15	24	29	35				20	3	4	6	9	12	15	21	28	35		
									30	3	2.5	3.5	6	4	6	8	12	15	19	12	15	19	10	2.5	3.5	5	4.5	6	8	14	18	23	17	22	25	20	2	3	5	4.5	6	9	15	19	27	18	23
			40							3	2.5	3.5	6	3.5	5	7	10	13	17	12	14	18	10	2.5	3.5	5.5	4	6	8	12	16	20	15	18	22	20	2.5	3.5	5.5	3.5	5	9	13	17	22	16	20
							60			3	2.5	3.5	6	2.5	4	7	9	11	14	10	12	17	10	2.5	3.5	5.5	3	4	6	10	13	16	13	16	20	20	2.5	3.5	5.5	3	4	6	9	13	17	12	17
					SAM-06-04			FCS 06 & ACS 04	10	3	3	4	5	7	10	13							10	3	4	5	7	10	13	21	26	33				20	3	4	5	7	10	13	17	22	30	22	27
			30							3	3	4	5	4	6	8	12	14	21	15	19	22	10	2.5	3.5	5	4	6	8.5	13	16	22	16	21	23	20	3	4	5	4	6	11	16	21	28	18	24
							40			3	3	4	5.5	3.5	5	7	10	12	17	12	17	21	10	2.5	3.5	5	4	5	7	11	14	20	14	18	25	20	2.5	3.5	5	3	5	8	9	13	17	13	18
									60	3	3	4	6	3	4	6	8	10	13	10	13	18	10	3	4	5	3.5	4.5	7	9	12	16	12	16	21	20	3	3.5	5	3	4	5.5	8	10	15	12	16
	SAM-07-05	FCS 07 & ACS 05	10							3	3	4	5	8	11	15							10	3	4	5	8	11	15	21	27	35				20	3	4	5	8	11	15	19	24	33		
							30			3	3	4	5	5	6.5	9	13	18	23	17	25	27	10	3	4	5	6	7	10	13	17	22	17	25	27	20	3	4	5	6	7	10	14	17	24	18	22
									40	3	3	4	5.5	5.5	6	9	11	15	19	17	24	30	10	3	4	5.5	4.5	7	7.5	12	15	20	16	20	29	20	3	3.5	5	4.5	7	7.5	12	15	20	16	20
			60							3	3	4	6	4	6	8	9	12	16	14	19	27	10	3	4	6	4	6	8	9	12	16	14	17	21	20	3	4	6	5	6.5	7.5	10	13	17	13	17

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