

Atomizing Spray Nozzles

All stainless steel construction for durability and corrosion resistance!

What Are Atomizing Nozzles?

EXAIR's Atomizing Spray Nozzles atomize fluids (most commonly water) in a range of spray patterns for a variety of uses. They combine liquid and compressed air to create a mist of atomized liquid that can be easily adjusted to meet the needs of your application. All models use stainless steel construction for durability and corrosion resistance. Atomizing spray nozzles are available in 1/4 NPT and 1/2 NPT sizes. See pages 66-74 for 1/4 NPT sizes and 75-80 for 1/2 NPT sizes.

EXAIR's atomizing nozzles are available in 3 basic families:

Internal Mix:

Internal mix nozzles mix the liquid and air inside the air cap and produce the finest atomization. Internal mix nozzles can be used on liquids with a viscosity up to 300 cP. Both air and liquid sides are pressure fed.

External Mix:

External mix nozzles have the highest flow rates and allow the air and liquid flows to be adjusted independently. These nozzles are best where precise liquid flow is needed. External mix nozzles can be used on liquids with a viscosity above 300 cP. Both air and liquid sides are pressure fed.

Siphon Fed:

Siphon fed nozzles require no liquid pressure and can be used with gravity fed liquids or liquids from a siphon height as much as 36 inches (91cm). Siphon fed nozzles can be used on liquids with a viscosity up to 200 cP.

Why Atomizing Nozzles?

With EXAIR's atomizing nozzles, you can coat, cool, treat and paint a variety of products. Used with water, they are an efficient way to cool hot items in your automated process. These nozzles are also an excellent choice for dust mitigation.

Sound levels for the individual Atomizing Spray Nozzles are not provided. The fluid, pressure, surfaces being treated and surrounding enclosures used in conjunction with the Atomizing Spray Nozzle to form the system will determine the actual sound levels (which can vary greatly). Max temperature is 400°F (204°C) for Atomizing Spray Nozzles. All atomizing nozzles are CE compliant.

Applications

- Washing
- Rinsing
- Coating
- Cooling
- Quenching
- Wetting (moistening)
- Humidification
- Dust Control

Advantages

- Fully adjustable
- Maximizes liquid dispersion
- Minimizes liquid consumption
- All stainless steel construction
- Compact
- Versatile
- Interchangeable liquid and air caps
- Minimizes air consumption
- Fine atomization



A Model AN1010SS Internal Mix Narrow Angle Round Atomizing Nozzle is used to mark strips of steel before they leave the mill.



A Model SR1010SS is used to supply a cooling mist for a drilling operation.



(2) Model EB1030SS atomizing nozzles are used to give a final sanitary rinse prior to labeling wine bottles.



Mounting Brackets are available - Model 901318 for 1/4 NPT and Model 901556 for 1/2 NPT atomizing nozzles.

For more information about droplet size and spray angle, see page 84.

Internal Mix Narrow Angle Round Pattern - 1/4 NPT



Model AN1010SS, AN1020SS, AN1030SS, and AN1040SS

1/4 NPT internal mix narrow angle round pattern nozzles are excellent for spraying a concentrated mist of liquid. Because of the versatility of their adjustments, they can apply a heavy coat up close or send a very fine mist over 30 feet away! They are often used for precision application of lubricants during assembly, or marking items as they move through an assembly line. Narrow angle round pattern atomizing nozzles are capable of delivering the most liquid of any of our 1/4 NPT internal mix atomizing nozzles.

For pressure fed applications not requiring independent air and liquid control.



Model: AN1010SS
Material: Type 303 Stainless Steel



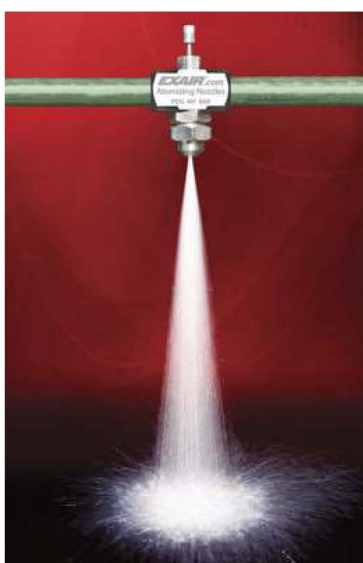
Model: AN1020SS
Material: Type 303 Stainless Steel



Model: AN1030SS
Material: Type 303 Stainless Steel

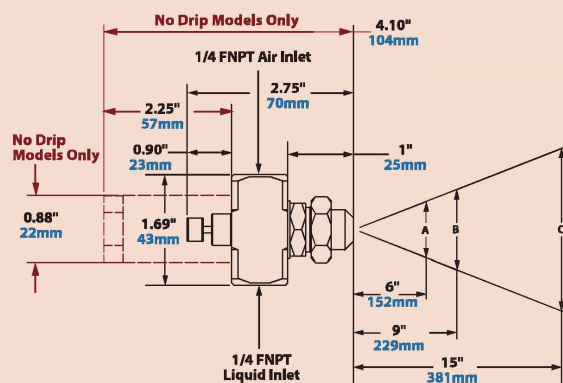


Model: AN1040SS
Material: Type 303 Stainless Steel



The amount of liquid applied can be greatly varied by adjusting the valve or inlet pressures.

Dimensions and Airflow Pattern



No Drip Only Dimensions in Red See page 81 for No Drip Atomizing Nozzles

For more information about droplet size and spray angle, see page 84.

10 PSI/0.7 BAR Liquid																	20 PSI/1.4 BAR Liquid																	30 PSI/2.1 BAR Liquid																	40 PSI/2.8 BAR Liquid																	60 PSI/4.1 BAR Liquid																	Spray Dimensions											
Model	Air Pressure PSI/BAR		GPH/ LPH		SCFM/ SLPM		Air Pressure PSI/BAR		GPH/ LPH		SCFM/ SLPM		Air Pressure PSI/BAR		GPH/ LPH		SCFM/ SLPM		Air Pressure PSI/BAR		GPH/ LPH		SCFM/ SLPM		Air Pressure PSI/BAR		GPH/ LPH		SCFM/ SLPM		Air Pressure PSI/BAR		GPH/ LPH		SCFM/ SLPM		Air PSI/ BAR		Liquid PSI/BAR		Width			Max. Depth feet/m																																																				
	PSI	BAR	US	UK	US	UK	PSI	BAR	US	UK	US	UK	PSI	BAR	US	UK	US	UK	PSI	BAR	US	UK	US	UK	PSI	BAR	US	UK	US	UK	PSI	BAR	US	UK	PSI	BAR	in	cm	in	cm	in	cm																																																						
ANT1010SS	10	0.7	1.4	5.3	0.6	17	18	1.2	1.8	6.8	0.9	25	24	1.7	2.3	8.7	1.0	28	30	2.1	2.7	10.2	1.2	34	40	2.8	3.3	12.5	1.5	42	12	0.8	10	0.7	2.3	6	3.3	8	5.0	13	6	1.8																																																						
	12	0.8	1.2	4.5	0.7	20	22	1.5	1.6	6.1	1.0	28	32	2.2	1.9	7.2	1.3	37	38	2.6	2.3	8.7	1.5	42	52	3.6	2.8	10.6	1.9	54	20	1.4	20	1.4	2.8	7	3.8	10	6.0	15	8	2.4																																																						
	14	1.0	1.1	4.2	0.8	23	24	1.7	1.5	5.7	1.1	31	36	2.5	1.6	6.1	1.5	42	44	3.0	1.9	7.2	1.7	48	62	4.3	2.3	8.7	2.4	68	42	2.9	40	2.8	3.5	9	4.5	11	6.5	17	10	3.0																																																						
	---	---	---	---	---	---	26	1.8	1.3	4.9	1.2	34	40	2.8	1.3	4.9	1.7	48	48	3.3	1.7	6.4	2.0	57	70	4.8	1.9	7.2	2.8	79	58	4.0	60	4.1	4.0	10	5.0	13	7.0	18	11	3.4																																																						
ANT1020SS	16	1.1	3.7	14.0	2.8	79	28	1.9	5.2	19.7	4.0	113	40	2.8	6.0	22.7	5.2	147	48	3.3	7.0	26.5	5.9	167	65	4.5	9.9	37.5	7.0	198	24	1.7	10	0.7	2.5	6	3.5	9	5.5	14	11	3.4																																																						
	20	1.4	2.5	9.5	3.4	96	36	2.5	2.7	10.2	5.1	144	48	3.3	3.8	14.4	6.4	181	65	4.5	3.6	13.6	8.1	229	80	5.5	6.6	25.0	8.6	244	38	2.6	20	1.4	2.8	7	4.0	10	6.5	17	12	3.7																																																						
	24	1.7	1.4	5.3	4.0	113	40	2.8	1.7	6.4	5.7	161	55	3.8	2.1	7.9	7.3	207	75	5.2	1.4	5.3	9.8	277	90	6.2	4.5	17.0	10.1	286	55	3.8	30	2.1	3.0	8	4.5	11	6.5	17	13	4.0																																																						
	28	1.9	0.6	2.3	4.6	130	44	3.0	0.8	3.0	6.4	181	60	4.1	1.1	4.2	8.1	229	80	5.5	0.8	3.0	10.2	289	100	6.9	2.4	9.1	11.3	320	65	4.5	40	2.8	3.5	9	5.0	13	7.0	18	14	4.3																																																						
ANT1030SS	12	0.8	7.8	29.5	1.9	54	20	1.4	12.9	48.8	2.5	71	30	2.1	15.1	57.2	3.4	96	38	2.6	18.0	68.1	4.1	116	54	3.7	23.0	87.1	5.3	150	14	1.0	10	0.7	2.8	7	4.5	11	6.5	17	10	3.0																																																						
	14	1.0	6.0	22.7	2.2	62	24	1.7	9.8	37.1	3.0	85	38	2.6	9.4	35.6	4.5	127	46	3.2	13.1	49.6	5.1	144	65	4.5	17.1	64.7	6.7	190	20	1.8	20	1.4	3.3	8	5.0	13	7.0	18	16	4.9																																																						
	16	1.1	4.4	16.7	2.6	74	28	1.9	7.0	26.5	3.6	102	42	2.9	7.0	26.5	5.1	144	52	3.6	9.6	36.3	6.0	170	75	5.2	12.3	46.6	8.0	227	40	2.8	30	2.1	3.8	10	5.5	14	7.0	18	19	5.8																																																						
	18	1.2	3.3	12.5	2.9	82	32	2.2	4.1	15.5	4.4	125	46	3.2	5.0	18.9	5.9	167	56	3.9	7.3	27.6	6.6	187	85	5.9	7.3	27.6	9.6	272	50	3.4	40	2.8	4.0	10	6.0	15	8.0	20	22	6.7																																																						
ANT1040SS	14	1.0	6.3	23.8	3.5	99	20	1.4	24.0	90.8	3.0	85	28	1.9	33.0	125	3.4	96	32	2.2	46.5	176	2.8	79	42	2.9	66.0	250	2.7	76	14	1.0	10	0.7	3.0	8	4.5	11	6.5	17	17	5.2																																																						
	16	1.1	3.0	11.4	4.2	119	24	1.7	13.0	49.2	4.2	119	32	2.2	24.0	90.8	4.6	130	40	2.8	30.0	114	5.1	144	50	3.4	54.0	204	4.3	122	24	1.7	20	1.4	3.5	9	6.0	15	7.5	19	21	6.4																																																						
	---	---	---	---	---	---	26	1.8	9.0	34.1	4.9	139	36	2.5	12.5	47.3	5.9	167	46	3.2	16.5	62.5	6.8	193	58	4.0	39.0	148	6.6	187	34	2.3	30	2.1	4.0	10	6.5	17	8.0	20	26	7.9																																																						
	---	---	---	---	---	---	28	1.9	5.5	20.8	5.6	159	40	2.8	6.0	22.7	7.4	210	50	3.4	10.3	39.0	8.2	232	70	4.8	15.8	60	10.2	289	64	4.4	60	4.1	5.0	13	7.0	18	9.0	23	35	10.7																																																						

Internal Mix Wide Angle Round Pattern - 1/4 NPT



Model: AW1010SS
Material: Type 303 Stainless Steel



Model: AW1020SS
Material: Type 303 Stainless Steel



Model: AW1030SS
Material: Type 303 Stainless Steel



Model: AW1040SS
Material: Type 303 Stainless Steel

Model AW1010SS, AW1020SS, AW1030SS, and AW1040SS

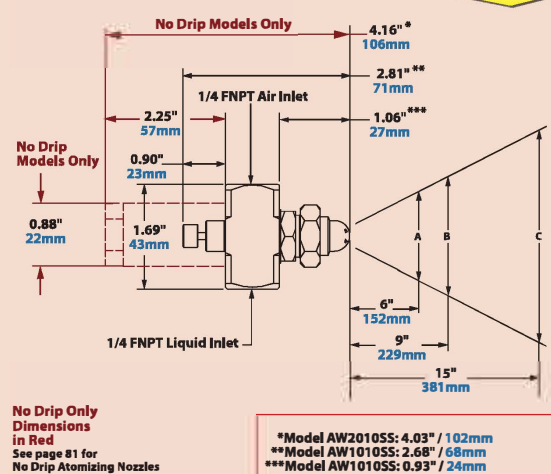
EXAIR's 1/4 NPT internal mix wide angle round pattern atomizing nozzles are great for covering a broad area. They can be adjusted for a light mist or a heavy soaking spray. They are popular for dust mitigation, humidification, and cooling of products, people or livestock in a broad area. These nozzles are also perfect for applying a coating to parts packed in large containers, for example, misting a container of stamped steel parts with oil to prevent oxidation during shipment.

For pressure fed applications not requiring independent air and liquid control.



A Model AW1030SS is used to keep dust down during charcoal briquette production.

Dimensions and Airflow Pattern



For more information about droplet size and spray angle, see page 84.

Spray Nozzles

	10 PSI/0.7 BAR Liquid				20 PSI/1.4 BAR Liquid				30 PSI/2.1 BAR Liquid				40 PSI/2.8 BAR Liquid				60 PSI/4.1 BAR Liquid				Spray Dimensions																					
Model	Air Pressure PSI/BAR		GPH/ LPH	SCFM/ SLPM	Air Pressure PSI/BAR		GPH/ LPH	SCFM/ SLPM	Air Pressure PSI/BAR		GPH/ LPH	SCFM/ SLPM	Air Pressure PSI/BAR		GPH/ LPH	SCFM/ SLPM	Air Pressure PSI/BAR		GPH/ LPH	SCFM/ SLPM	Air PSI/ BAR		Liquid PSI/BAR		Pressure			Width			Max. Depth/feet/m											
	PSI	BAR			PSI	BAR			PSI	BAR			PSI	BAR			PSI	BAR			in	cm	in	cm	in	cm	A	B	C													
AW1010SS	8	0.6	1.8	6.8	0.3	8	14	1.0	2.4	9.1	0.4	11	22	1.5	2.7	10.2	0.5	14	30	2.1	3.0	11.4	0.7	20	44	3.0	3.5	13.2	0.9	25	10	0.7	10	0.7	7	18	9	23	14	36	5	1.5
	10	0.7	1.6	6.1	0.4	11	18	1.2	2.1	7.9	0.5	14	30	2.1	2.3	8.7	0.7	20	38	2.6	2.6	9.8	0.8	23	55	3.8	3.1	11.7	1.1	31	20	1.4	20	1.4	9	23	11	28	15	38	6	1.8
	12	0.8	1.5	5.7	0.4	11	22	1.5	1.9	7.2	0.6	17	36	2.5	1.9	7.2	0.8	23	46	3.2	2.1	7.9	1.0	28	65	4.5	2.5	9.5	1.3	37	34	2.3	30	2.1	10	25	12	30	16	41	8	2.4
	14	1.0	1.3	4.9	0.5	14	26	1.8	1.6	6.1	0.7	20	40	2.8	1.6	6.1	0.9	25	50	3.4	1.9	7.2	1.1	31	75	5.2	2.1	7.9	1.5	42	42	2.9	40	2.8	10	25	12	30	16	41	9	2.7
AW1020SS	12	0.8	2.8	10.6	1.7	48	22	1.5	4.0	15.1	2.3	65	30	2.1	5.4	20.4	2.5	71	38	2.6	6.4	24.2	2.9	82	54	3.7	8.5	32.2	3.5	99	12	0.8	10	0.7	10	25	13	33	17	43	9	2.7
	14	1.0	1.6	6.1	2.0	57	24	1.7	3.1	11.7	2.5	71	34	2.3	3.8	14.4	3.2	91	44	3.0	4.4	16.7	3.9	110	58	4.0	7.0	26.5	4.1	116	24	1.7	20	1.4	11	28	13	33	18	46	11	3.4
	---	---	---	---	---	---	26	1.8	2.0	7.6	2.9	82	38	2.6	1.8	6.8	4.0	113	48	3.3	2.6	9.8	4.6	130	65	4.5	5.4	20.4	5.2	147	34	2.3	30	2.1	11	28	13	33	18	46	12	3.7
	---	---	---	---	---	---	---	---	---	---	---	---	40	2.8	0.9	3.4	4.5	127	52	3.6	1.0	3.8	5.4	153	75	5.2	1.7	6.4	7.1	201	46	3.2	40	2.8	11	28	14	36	18	46	14	4.3
AW1030SS	10	0.7	6.8	25.7	1.1	31	20	1.4	8.5	32.2	1.5	42	30	2.1	9.0	34.1	2.0	57	40	2.8	10.0	37.9	2.6	74	56	3.9	15.0	56.8	2.9	82	12	0.8	10	0.7	10	25	13	33	18	46	9	2.7
	12	0.8	4.5	17.0	1.4	40	22	1.5	6.0	22.7	1.9	54	34	2.3	5.8	22.0	2.8	79	44	3.0	7.0	26.5	3.4	96	60	4.1	12.0	45.4	3.5	99	22	1.5	20	1.4	11	28	13	33	18	46	11	3.4
	14	1.0	2.2	8.3	1.9	54	24	1.7	4.5	17.0	2.3	65	38	2.6	2.4	9.1	3.8	108	48	3.3	3.7	14.0	4.2	119	70	4.8	5.0	18.9	5.6	159	34	2.3	30	2.1	11	28	14	36	18	46	13	4.0
	---	---	---	---	---	---	26	1.8	2.6	9.8	2.7	76	40	2.8	1.4	5.3	4.3	122	52	3.6	1.5	5.7	5.2	147	80	5.5	0.8	3.0	7.7	218	46	3.2	40	2.8	11	28	14	36	20	51	19	5.8
AW1040SS	24	1.7	6.0	22.7	5.4	153	38	2.6	9.3	35.2	7.7	218	48	3.3	15.5	58.7	8.4	238	60	4.1	19.3	73.1	10.3	292	85	5.9	24.0	91.0	13.8	391	28	1.9	10	0.7	10	25	14	36	16	41	16	4.5
	28	1.9	4.0	15.1	6.1	173	44	3.0	5.5	20.8	9.1	258	56	3.9	9.0	34.1	10.6	300	70	4.8	12.0	45.4	12.8	362	90	6.2	21.3	80.6	15.2	430	46	3.2	20	1.4	11	28	14	36	18	46	18	5.5
	30	2.1	2.5	9.5	6.7	190	48	3.3	3.5	13.2	10.0	283	62	4.3	6.0	22.7	12.1	343	80	5.5	6.5	24.6	14.7	416	95	6.6	18.5	70.0	16.5	467	60	4.1	30	2.1	12	30	16	41	21	53	21	6.4
	32	2.2	2.0	7.6	7.3	207	52	3.6	1.9	7.2	10.8	306	70	4.8	2.8	10.6	13.4	379	90	6.2	2.8	10.6	17.2	487	100	6.9	15.8	59.8	17.3	490	75	5.2	40	2.8	12	30	16	41	22	56	24	7.3

Internal Mix Flat Fan Pattern - 1/4 NPT



Model: AF1010SS
Material: Type 303 Stainless Steel



Model: AF1020SS
Material: Type 303 Stainless Steel



Model: AF1030SS
Material: Type 303 Stainless Steel



Model: AF1040SS
Material: Type 303 Stainless Steel

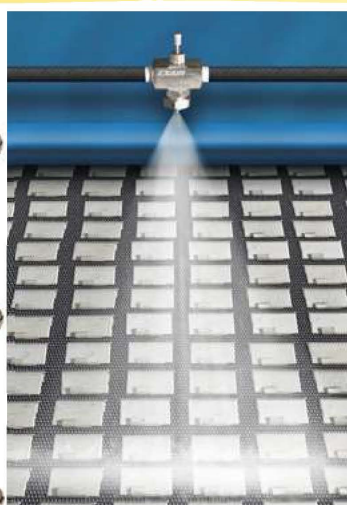


Model: AF1050SS
Material: Type 303 Stainless Steel

Model AF1010SS, AF1020SS, AF1030SS, AF1040SS, and AF1050SS

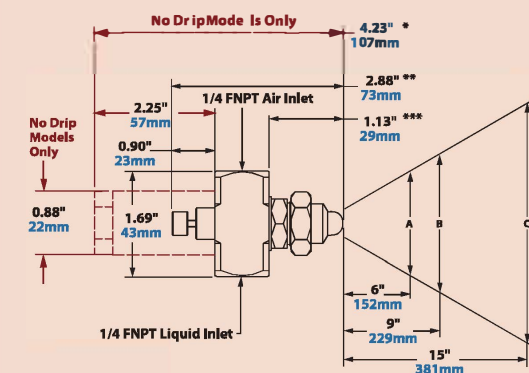
1/4 NPT internal mix flat fan pattern atomizing nozzles are designed with efficiency in mind. Especially good for vertical or horizontal assembly lines, their broad thin pattern makes efficient use of your expensive liquids. Their output can be adjusted for a very light film or a heavy coat of whatever liquid you're working with. Whether it's applying paint to hanging sheet metal, or using a water mist to cool a laminate web, flat fan atomizing nozzles cover a wide flat area, ideal for products moving on a conveyor.

For pressure fed applications not requiring independent air and liquid control.



A Model AF1030SS is used to spray an anti-corrosion coating on stamped steel parts as they travel on a conveyor.

Dimensions and Airflow Pattern



No Drip Only
Dimensions
in Red
See page 81 for
No Drip Atomizing Nozzles

*Model AF2010SS & AF2020SS: 4.10" / 104mm
**Model AF1010SS & AF1020SS: 2.75" / 70mm
***Model AF1010SS & AF1020SS: 1" / 25mm

For more information about droplet size and spray angle, see page 84.

Model	10 PSI/0.7 BAR Liquid						20 PSI/1.4 BAR Liquid						30 PSI/2.1 BAR Liquid						40 PSI/2.8 BAR Liquid						60 PSI/4.1 BAR Liquid						Spray Dimensions											
	Air Pressure PSI/BAR			GPH/ LPH			Air Pressure PSI/BAR			GPH/ LPH			Air Pressure PSI/BAR			GPH/ LPH			Air Pressure PSI/BAR			GPH/ LPH			Air Pressure PSI/BAR			GPH/ LPH			Air Pressure PSI/BAR			Air PSI/ Liquid PSI/BAR			Max. Depth/ feet/m					
	PSI	BAR	SLPM	PSI	BAR	SLPM	PSI	BAR	SLPM	PSI	BAR	SLPM	PSI	BAR	SLPM	PSI	BAR	SLPM	PSI	BAR	SLPM	PSI	BAR	SLPM	PSI	BAR	SLPM	PSI	BAR	SLPM	A in	B in	C in									
AF1010SS	10	0.7	1.6	6.1	0.7	20	18	1.2	2.1	7.9	1.0	28	28	1.9	2.4	9.1	1.4	40	38	2.6	2.6	9.8	1.7	48	55	3.8	3.2	12.1	2.2	62	16	1.1	10	0.7	9	23	12	30	15	38	5	1.5
	14	1.0	1.4	5.3	0.9	25	26	1.8	1.7	6.4	1.3	37	40	2.8	1.8	6.8	1.8	51	50	3.4	2.0	7.6	2.1	59	75	5.2	2.3	8.7	3.0	85	30	2.1	20	1.4	11	28	13	33	17	43	6	1.8
	18	1.2	1.1	4.2	1.1	31	34	2.3	1.2	4.5	1.7	48	48	3.3	1.4	5.3	2.1	59	60	4.1	1.6	6.1	2.5	71	90	6.2	1.6	6.1	3.6	102	40	2.8	30	2.1	12	30	14	36	20	51	6	1.8
	22	1.5	0.8	3.0	1.3	37	40	2.8	0.8	3.0	1.9	54	55	3.8	1.0	3.8	2.4	68	70	4.8	1.2	4.5	3.0	85	100	6.9	1.3	4.9	4.1	116	85	5.9	60	4.1	14	36	17	43	23	58	7	2.1
AF1020SS	12	0.8	2.4	9.1	0.7	20	20	1.4	3.4	12.9	0.9	25	30	2.1	3.9	14.8	1.2	34	38	2.6	4.6	17.4	1.4	40	65	4.5	4.7	17.8	2.2	62	16	1.1	10	0.7	11	28	14	36	19	48	5	1.5
	16	1.1	1.8	6.8	0.9	25	28	1.9	2.4	9.1	1.2	34	38	2.6	2.9	11.0	1.5	42	50	3.4	3.2	12.1	1.9	54	75	5.2	3.7	14.0	2.6	74	42	2.9	30	2.1	14	36	18	46	23	58	6	1.8
	18	1.2	1.5	5.7	1.0	28	32	2.2	1.8	6.8	1.5	42	46	3.2	2.0	7.6	1.9	54	60	4.1	2.2	8.3	2.3	65	85	5.9	2.8	10.6	3.0	85	50	3.4	40	2.8	16	41	19	48	26	66	7	2.1
	20	1.4	1.3	4.9	1.1	31	36	2.5	1.4	5.3	1.7	48	50	3.4	1.6	6.1	2.1	59	70	4.8	1.4	5.3	2.8	79	95	6.6	2.1	7.9	3.6	102	80	5.5	60	4.1	16	41	21	53	29	74	8	2.4
AF1030SS	16	1.1	4.5	17.0	2.0	57	28	1.9	6.0	22.7	2.8	79	38	2.6	7.0	26.5	3.5	99	46	3.2	8.5	32.2	4.0	113	65	4.5	11.0	41.6	5.3	150	20	1.4	10	0.7	11	28	14	36	19	48	10	3.0
	20	1.4	3.3	12.5	2.4	68	32	2.2	5.0	18.9	3.1	88	42	2.9	6.4	24.2	3.8	108	52	3.6	7.5	28.4	4.5	127	70	4.8	10.0	37.9	5.7	161	42	2.9	30	2.1	16	41	21	53	29	74	12	3.7
	24	1.7	2.4	9.1	2.7	76	34	2.3	4.5	17.0	3.3	93	46	3.2	5.5	20.8	4.1	116	58	4.0	6.3	23.8	4.9	139	80	5.5	8.0	30.3	6.4	181	54	3.7	40	2.8	19	48	25	64	33	84	14	4.3
	28	1.9	1.5	5.7	3.1	88	36	2.5	3.9	14.8	3.5	99	48	3.3	5.1	19.3	4.4	125	60	4.1	6.0	22.7	5.2	147	90	6.2	6.4	24.2	7.2	204	75	5.2	60	4.1	20	51	26	66	35	89	15	4.6
AF1040SS	12	0.8	8.1	30.7	1.4	40	22	1.5	12.0	45.4	1.9	54	34	2.3	13.1	49.6	2.7	76	46	3.2	14.3	54.1	3.4	96	65	4.5	18.3	69.3	4.5	127	16	1.1	10	0.7	14	36	18	46	24	61	10	3.0
	16	1.1	5.9	22.3	1.8	51	30	2.1	7.1	26.9	2.7	76	42	2.9	8.9	33.7	3.4	96	54	3.7	10.3	39.0	4.1	116	80	5.5	11.9	45.0	5.9	167	32	2.2	20	1.4	15	38	19	48	27	69	12	3.7
	18	1.2	5.0	18.9	2.0	57	34	2.3	5.6	21.2	3.1	88	48	3.3	6.3	23.8	4.1	116	60	4.1	7.9	29.9	4.8	136	90	6.2	8.5	32.2	6.8	193	56	3.9	40	2.8	20	51	25	64	34	86	15	4.6
	22	1.5	3.3	12.5	2.4	68	38	2.6	4.1	15.5	3.5	99	52	3.6	5.0	18.9	4.5	127	70	4.8	4.6	17.4	5.8	164	100	6.9	6.0	22.7	7.9	224	85	5.9	60	4.1	21	53	27	69	36	91	15	4.6
AF1050SS	14	1.0	8.8	33.3	3.0	85	26	1.8	11.5	43.5	4.3	122	34	2.3	20.8	78.7	4.6	130	42	2.9	30.0	114	4.8	136	58	4.0	42.0	159	5.5	156	14	1.0	10	0.7	14	36	18	46	23	58	10	3.0
	16	1.1	5.3	20.1	3.7	105	28	1.9	7.8	29.5	4.9	139	36	2.5	17.0	64.3	4.9	139	46	3.2	20.5	77.6	6.1	173	65	4.5	30.0	114	6.8	193	26	1.8	20	1.4	15	38	19	48	24	61	13	4.0
	20	1.4	3.3	12.5	2.4	68	38	2.6	4.1	15.5	3.5	99	52	3.6	5.0	18.9	4.5	127	70	4.8	4.6	17.4	5.8	164	100	6.9	6.0	22.7	7.9	224	85	5.9	60	4.1	21	53	27	69	36	91	15	4.6
	24	1.7	2.4	9.1	2.7	76	34	2.3	4.5	17.0	3.3	93	46	3.2	5.5	20.8	4.1	116	58	4.0	6.3	23.8	4.9	139	80	5.5	8.0	30.3	6.4	181	54	3.7	40	2.8	19	48	25	64	33	84	14	4.3

Internal Mix Deflected Flat Fan Pattern - 1/4 NPT



Model AD1010SS

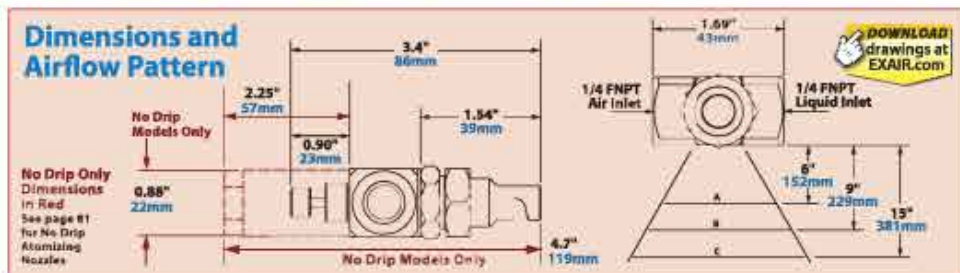
Material: Type 303 Stainless Steel

1/4 NPT internal mix deflected flat fan nozzles are designed for applications where space is at a premium. The flat fan pattern sprays at a right angle to the nozzle's orientation, allowing spray to be placed precisely where it's needed in close quarters. These nozzles are ideal for coating the inside of enclosures and ductwork.

For pressure fed applications not requiring independent air and liquid control.



A Model AD1010SS is used to apply a protective coating to wood panels.



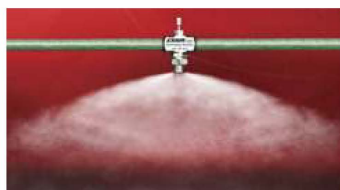
For more information about droplet size and spray angle, see page 84.

10 PSI/0.7 BAR Liquid						20 PSI/1.4 BAR Liquid						30 PSI/2.1 BAR Liquid						40 PSI/2.8 BAR Liquid						60 PSI/4.1 BAR Liquid						Spray Dimensions																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
Model	Air Pressure PSI/BAR	GPH/ LPH	SCFM/ SLPM			Air Pressure PSI/BAR	GPH/ LPH	SCFM/ SLPM			Air Pressure PSI/BAR	GPH/ LPH	SCFM/ SLPM			Air Pressure PSI/BAR	GPH/ LPH	SCFM/ SLPM			Air Pressure PSI/BAR	GPH/ LPH	SCFM/ SLPM			Pressure		Width			Max. Depth in/cm																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
																										Air PSI/ BAR	Liquid PSI/BAR	A	B	C																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
AD1010SS	6	0.4	3.0	11.5	1.4	41	14	1.0	4.0	15.1	2.3	66	22	1.5	4.6	17.6	3.2	90	26	1.8	5.7	21.4	3.5	98	38	2.6	6.9	26.0	4.7	133	12	0.8	10	0.7	9	23	14	36	16	41	36	91																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
	8	0.6	2.7	10.1	1.8	50	18	1.2	3.3	12.4	2.9	82	26	1.8	4.1	15.4	3.7	105	32	2.2	4.9	18.6	4.3	121	54	3.7	5.3	20.1	6.6	188	22	1.5	20	1.4	11	28	13	33	16	41	42	102																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
	10	0.7	2.2	8.3	2.1	59	20	1.4	2.9	11.0	3.2	91	30	2.1	3.4	12.9	4.3	122	38	2.6	4.2	15.7	5.1	144	62	4.3	4.6	17.3	7.8	221	34	2.3	30	2.1	8	20	12	30	16	41	45	114																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
	12	0.8	1.8	6.9	2.4	69	22	1.5	2.3	8.9	3.6	101	34	2.3	2.8	10.4	5.0	140	46	3.2	4.7	10.3	6.3	180	70	4.8	3.1	11.9	9.1	258	46	3.2	40	2.8	9	23	12	30	15	38	48	122																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													

Internal Mix 360° Hollow Circular Pattern - 1/4 NPT



Model: AT1010SS
Material: Type 303 Stainless Steel

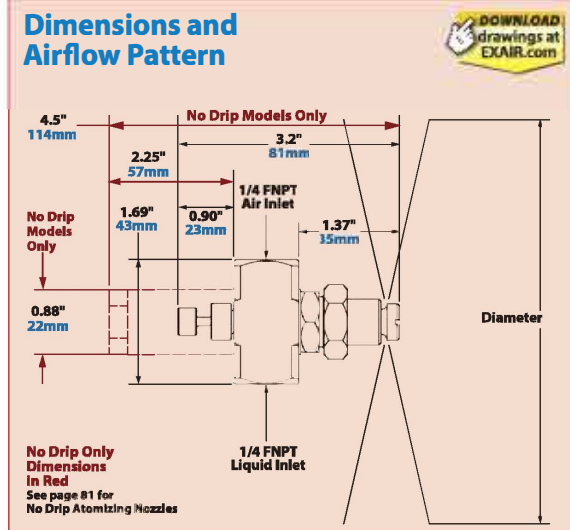


This 360° circular pattern nozzle can be used to coat inside diameters or cover a broad area of over 4' (1219mm).

Model AT1010SS

1/4 NPT internal mix 360° nozzles are designed for applications where the spray pattern must be oriented away from the nozzle in all directions. 360° nozzles are ideal where a smooth, even coating is needed on the ID of pipe or similar ductwork. They also work great for operations where a mist over a broad area is needed, such as dust suppression, humidification and cooling.

For pressure fed applications not requiring independent air and liquid control.



For more information about droplet size and spray angle, see page 84.

10 PSI/0.7 BAR Liquid							20 PSI/1.4 BAR Liquid						30 PSI/2.1 BAR Liquid						40 PSI/2.8 BAR Liquid						60 PSI/4.1 BAR Liquid						Spray Dimensions						
Model	Air Pressure PSI/BAR		GPH/LPH		SCFM/ SLPM		Air Pressure PSI/BAR		GPH/LPH		SCFM/ SLPM		Air Pressure PSI/BAR		GPH/LPH		SCFM/ SLPM		Air Pressure PSI/BAR		GPH/LPH		SCFM/ SLPM		Air Pressure PSI/BAR		GPH/LPH		SCFM/ SLPM		Pressure		Diameter				
																															Air PSI/BAR	Liquid PSI/BAR		in	cm		
	AT1010SS	20	1.4	4.5	16.8	4.3	121	34	2.3	7.3	27.5	6.4	182	50	3.4	8.1	30.6	8.9	251	60	4.1	11.5	43.5	10.0	283	85	5.9	14.7	55.7	13.3	376	20	1.4	10	0.7	36	91
	24	1.7	2.6	9.7	5.3	150	38	2.6	5.2	19.6	7.3	206	56	3.9	5.4	20.3	10.0	285	70	4.8	7.1	26.8	11.8	335	90	6.2	12.7	47.9	14.1	398	34	2.3	20	1.4	39	99	
	26	1.8	2.0	7.5	5.7	162	42	2.9	3.6	13.5	8.2	231	60	4.1	4.2	15.7	10.7	303	80	5.5	4.1	15.4	13.5	383	95	6.6	10.6	40.2	14.9	423	50	3.4	30	2.1	44	112	
	28	1.9	1.6	5.9	6.2	176	48	3.3	2.1	7.8	9.3	264	70	4.8	2.0	7.4	12.6	356	90	6.2	2.0	7.7	15.5	439	100	6.9	8.9	33.7	15.8	449	60	4.1	40	2.8	49	124	

External Mix Round Pattern - 1/4 NPT



Model: ER1010SS
Material: Type 303 Stainless Steel



Model: ER1020SS
Material: Type 303 Stainless Steel



Model: ER1030SS
Material: Type 303 Stainless Steel



Model: ER1040SS
Material: Type 303 Stainless Steel

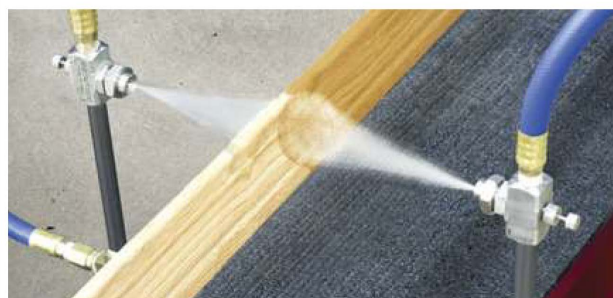


Model: ER1050SS
Material: Type 303 Stainless Steel

**Model ER1010SS, ER1020SS,
ER1030SS, ER1040SS and ER1050SS**

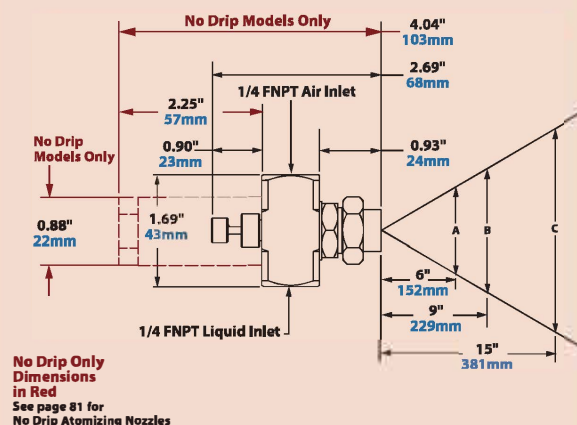
1/4 NPT external mix round pattern nozzles are great where a high volume of liquid is needed over a specific area or general area, but not in a flat pattern. Applications include spot treatments of parts, covering irregularly shaped objects or covering a container of parts with a heavy coat. They are also an excellent choice for controlling heavy dust and particulates. Since they are external mix, airflow and liquid flow can be controlled independently.

**For pressure fed applications
with independent air and liquid
control.**



(2) Model ER1020SS atomizing nozzles are used to apply a fire retardant coating to wood trim.

Dimensions and Airflow Pattern



For more information about droplet size and spray angle, see page 84.

3 PSI/0.2 BAR Liquid																5 PSI/0.3 BAR Liquid						10 PSI/0.7 BAR Liquid						20 PSI/1.4 BAR Liquid						40 PSI/2.8 BAR Liquid						Spray Dimensions											
Model	Air Pressure PSI/BAR	GPH/ LPH	SCFM/ SLPM	Air Pressure PSI/ BAR	GPH/ LPH	SCFM/ SLPM	Air Pressure PSI/ BAR	GPH/ LPH	SCFM/ SLPM	Air Pressure PSI/ BAR	GPH/ LPH	SCFM/ SLPM	Air Pressure PSI/ BAR	GPH/ LPH	SCFM/ SLPM	Air Pressure PSI/ BAR	GPH/ LPH	SCFM/ SLPM	Air Pressure PSI/ BAR	GPH/ LPH	SCFM/ SLPM	Air PSI/ BAR	Liquid PSI/ BAR	Width						Max. Depth feet/m																					
																								Pressure		Width																									
																								Air PSI/ BAR		Liquid PSI/ BAR		A		B		C																			
																								in	cm	in	cm	in	cm																						
ER1010SS	5 0.3	1.0	3.8	0.9 25.5	5 0.3	1.4	5.3	0.9 25.5	10 0.7	1.9	7.2	1.3 36.8	20 1.4	2.7	10.2	1.9 53.8	20 1.4	3.8	14.4	1.9 53.8	10 0.7	3 0.2	3.0 7.6	4.3 10.9	6.3 16.0	9 2.7																									
	1.3 36.8			10 0.7	1.3 36.8			20 1.4	1.9 53.8			40 2.8	3.0 85.0			40 2.8	3.0 85.0			20 1.4	5 0.3	3.3 8.4	4.5 11.4	6.8 17.3	11 3.4																										
	2.0 1.4			1.9 53.8	30 2.1			2.4 68.0	40 2.8			3.0 85.0	60 4.1			4.1 116	60 4.1			4.1 116	40 2.8	20 1.4	3.5 8.9	5.0 12.7	7.0 17.8	14 4.3																									
	4.0 2.8			3.0 85.0	50 3.4			3.5 99.1	60 4.1			4.1 116	90 6.2			5.7 161	90 6.2			5.7 161	60 4.1	40 2.8	4.0 10.2	5.5 14.0	8.0 20.3	15 4.6																									
ER1020SS	6 0.4	2.5	9.5	0.9 25.5	10 0.7	3.2	12.1	1.3 36.8	10 0.7	4.3	16.3	1.3 36.8	20 1.4	5.9	22.3	2.9 82.1	40 2.8	7.5	28.4	3.0 85.0	10 0.7	3 0.2	3.8 9.7	5.0 12.7	7.5 19.1	10 3.0																									
	1.3 36.8			20 1.4	1.3 36.8			20 1.4	2.9 82.1			40 2.8	3.0 85.0			20 1.4	5 0.3			4.0 10.2	5.8 14.7	7.0 17.8	12 3.7																												
	1.3 36.8			20 1.4	1.8 51.0			20 1.4	1.9 53.8			40 2.8	3.1 87.8			60 4.1	3.1 87.8			40 2.8	10 0.7	4.3 10.9	6.0 15.2	8.3 21.1	15 4.6																										
	3.1 87.8			40 2.8	3.1 87.8			60 4.1	4.1 116			80 5.5	5.3 150			40 2.8	20 1.4			4.5 11.4	6.0 15.2	8.3 21.1	15 4.6																												
ER1030SS	10 0.7	4.4	16.7	3.6 102	60 4.1	5.5	20.8	4.1 116	60 4.1	7.6	28.8	4.1 116	90 6.2	11.0	41.6	5.9 167	90 6.2	14.0	53.0	5.9 167	60 4.1	40 2.8	5.0 12.7	6.5 16.5	8.5 21.6	16 4.9																									
	4.0 113			10 0.7	4.0 113			15 1.0	4.9 139			30 2.1	7.7 218			40 2.8	9.5 269			50 3.4	11.2 317	40 2.8	5 0.3	4.5 11.4	6.5 16.5	8.5 21.6		23 7.0																							
	6.0 170			20 1.4	6.0 170			30 2.1	7.7 218			40 2.8	9.5 269			50 3.4	11.2 317			40 2.8	10 0.7	4.8 12.2	6.8 17.3	9.0 22.9	24 7.3																										
	9.5 269			40 2.8	9.5 269			50 3.4	11.2 317			60 4.1	13.4 379			80 5.5	15.3 433			80 5.5	15.3 433	60 4.1	20 1.4	4.5 11.4	6.8 17.3	9.0 22.9		29 8.8																							
ER1040SS	15 1.0	10.0	37.9	4.9 139	20 1.4	13.5	51.1	6.0 170	30 2.1	18.8	71.2	7.7 218	40 2.8	27.6	104	9.5 269	50 3.4	31.0	117	11.2 317	20 1.4	3 0.2	5.8 14.7	7.5 19.1	10.0 25.4	15 4.6																									
	7.7 218			30 2.1	7.7 218			40 2.8	9.5 269			50 3.4	11.2 317			60 4.1	40 2.8			5 0.3	6.0 15.2	8.0 20.3	10.3 26.2	19 5.8																											
	9.5 269			40 2.8	9.5 269			60 4.1	11.7 331			60 4.1	11.7 331			70 4.8	13.4 379			60 4.1	10 0.7	6.0 15.2	8.0 20.3	10.5 26.7	23 7.0																										
	11.2 317			60 4.1	11.7 331			80 5.5	15.3 433			80 5.5	15.3 433			80 5.5	15.3 433			80 5.5	40 2.8	5.0 12.7	6.5 16.5	8.5 21.6	23 7.0																										
ER1050SS	4.0 2.8	18.0	68.1	14.0 396	55 3.8	26.0	98.0	18.0 510	65 4.5	41.0	155	21.0 595	80 5.5	60.0	227	25.3 716	—			—	—	—	—	—	—	—																									
	16.8 470			65 4.5	21.0 595			70 4.8	22.3 631			90 6.2	27.9 790			—	—			—	—	—	—	—	—	—		—																							
	19.7 558			70 4.8	22.3 631			80 5.5	25.3 716			—	—			—	—			—	—	—	—	—	—	—		—	—																						
	21.0 595			80 5.5	25.3 716			90 6.2	27.9 790			—	—			—	—			—	—	—	—	—	—	—		—	—																						
65 4.5			21.0 595	80 5.5			25.3 716	90 6.2			27.9 790	—			—	—			90 6.2	20 1.4	6.0 15.2	8.0 20.3	11.0 27.9	32 9.8																											

Note: When air pressure is 10x or more than liquid pressure, liquid flow may diminish.

External Mix Narrow Angle Flat Fan Pattern - 1/4 NPT



Model: EF1010SS

Material: Type 303 Stainless Steel

Model EF1010SS, EF1020SS, EF1030SS and EF1040SS

1/4 NPT external mix narrow angle flat fan pattern nozzles are great where a high volume of liquid is needed over a concentrated area. Since they are external mix, airflow and liquid flow can be controlled independently. External mix narrow angle flat fan pattern nozzles are the best choice where thicker liquids for a heavy coating are needed over a narrow band, such as a paint line.

For pressure fed applications with independent air and liquid control.



Model: EF1020SS

Material: Type 303 Stainless Steel



Model: EF1030SS

Material: Type 303 Stainless Steel



Model: EF1040SS

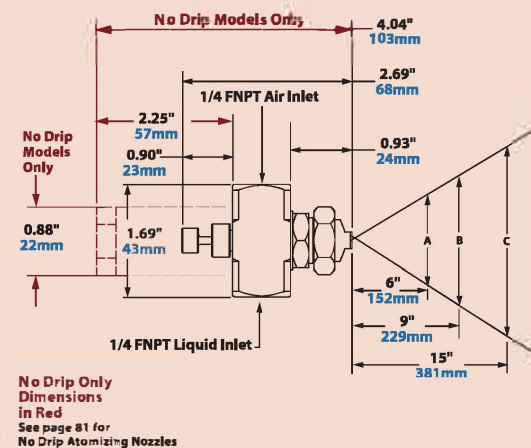
Material: Type 303 Stainless Steel



A Model EF1020SS is used to supply humidification for a corrosion test chamber.

Dimensions and Airflow Pattern

DOWNLOAD drawings at EXAIR.com



For more information about droplet size and spray angle, see page 84.

		3 PSI/0.2 BAR Liquid				5 PSI/0.3 BAR Liquid				10 PSI/0.7 BAR Liquid				20 PSI/1.4 BAR Liquid				40 PSI/2.8 BAR Liquid				Spray Dimensions																
Model	Air Pressure PSI/ BAR	GPH/ LPH	SCFM/ SLPM	Air Pressure PSI/ BAR	GPH/ LPH	SCFM/ SLPM	Air Pressure PSI/ BAR	GPH/ LPH	SCFM/ SLPM	Air Pressure PSI/ BAR	GPH/ LPH	SCFM/ SLPM	Air Pressure PSI/ BAR	GPH/ LPH	SCFM/ SLPM	Air Pressure PSI/ BAR	GPH/ LPH	SCFM/ SLPM	Pressure				Width						Max. Depth feet/m									
																			Air PSI/ BAR	Liquid PSI/ BAR	A	B	C															
																			in	cm	in	cm	in	cm														
EF1010SS	5	0.3		0.8	22.7	10	0.7		1.0	28.3	15	1.0		1.3	36.8	25	1.7		1.8	51.0	45	3.1		2.7	76.5	5	0.3	3	0.2	4.0	10.2	5.8	14.7	9.5	24.1	6	1.8	
	10	0.7	1.0	3.8	1.0	28.3	20	1.4	1.4	5.3	1.5	42.5	25	1.7	1.8	51.0	40	2.8	2.7	10.2	2.5	70.8	60	4.1	3.4	96.3	25	1.7	5	0.3	5.5	14.0	8.0	20.3	10.0	25.4	12	3.7
	20	1.4			1.5	42.5	30	2.1			2.0	56.6	40	2.8	2.5	70.8	60	4.1			3.4	96.3	75	5.2	4.1	116	50	3.4	20	1.4	6.3	16.0	9.3	23.6	12.0	30.5	16	4.9
	40	2.8			2.5	70.8	50	3.4			2.9	82.1	60	4.1	3.4	96.3	90	6.2			4.7	133	95	6.5	5.1	144	75	5.2	40	2.8	6.5	16.5	9.5	24.1	13.0	33.0	18	5.5
EF1020SS	10	0.7			1.0	28.3	15	1.0			1.3	36.8	20	1.4	1.5	42.5	35	2.4			2.2	62.3	50	3.4	2.9	82.1	10	0.7	3	0.2	4.5	11.4	7.0	17.8	11.0	27.9	9	2.7
	20	1.4	2.5	9.5	1.5	42.5	25	1.7	3.2	12.1	1.8	51.0	30	2.1	2.0	56.6	50	3.4	4.3	16.3	2.9	82.1	60	4.1	3.4	96.3	30	2.1	5	0.3	6.0	15.2	10.0	25.4	14.0	35.6	14	4.3
	30	2.1			2.0	56.6	40	2.8			2.5	70.8	50	3.4	2.9	82.1	70	4.8			3.8	108	80	5.5	4.3	122	60	4.1	20	1.4	6.5	16.5	11.0	27.9	16.0	40.6	17	5.2
	50	3.4			2.9	82.1	60	4.1			3.4	96.3	70	4.8	3.8	108	90	6.2			4.7	133	100	6.9	5.2	147	75	5.2	40	2.8	7.5	19.1	11.5	29.2	18.0	45.7	20	6.1
EF1030SS	10	0.7			3.5	99.1	20	1.4			5.3	150	25	1.7	6.1	173	40	2.8			8.4	238	50	3.4	10.0	283	10	0.7	3	0.2	6.0	15.2	9.0	22.9	12.0	30.5	12	3.7
	20	1.4	4.4	16.7	5.3	150	30	2.1	5.5	20.8	6.9	195	35	2.4	7.6	215	50	3.4	7.6	21.5	10.0	283	60	4.1	11.5	326	35	2.4	5	0.3	6.8	17.3	9.0	22.9	12.0	30.5	20	6.1
	30	2.1			6.9	195	40	2.8			8.4	238	50	3.4	10.0	283	70	4.8			12.7	360	80	5.5	13.7	388	60	4.1	20	1.4	7.0	17.8	11.0	27.9	14.0	35.6	28	8.5
	50	3.4			10.0	283	60	4.1			11.5	326	70	4.8	12.7	360	90	6.2			14.8	419	95	6.5	15.1	428	75	5.2	40	2.8	7.0	17.8	11.0	27.9	14.0	35.6	30	9.1
EF1040SS	15	1.0			4.4	125	25	1.7			6.1	173	35	2.4	7.6	215	45	3.1			9.2	261	55	3.8	10.7	303	15	1.0	3	0.2	6.0	15.2	10.0	25.4	14.0	35.6	13	4.0
	25	1.7	10.0	37.9	6.1	173	35	2.4	13.5	51.1	7.6	215	45	3.1	9.2	261	55	3.8	18.8	71.2	10.7	303	65	4.5	12.2	345	30	2.1	3	0.2	6.8	17.3	11.0	27.9	14.0	35.6	17	5.2
	40	2.8			8.4	238	50	3.4			10.0	283	60	4.1	11.5	326	70	4.8			12.7	360	80	5.5	13.7	388	50	3.4	10	0.7	7.5	19.1	12.0	30.5	15.0	38.1	22	6.7
	50	3.4			10.0	283	60	4.1			11.5	326	80	5.5	13.7	388	90	6.2			14.8	419	100	6.9	16.2	459	60	4.1	20	1.4	8.0	20.3	12.0	30.5	16.0	40.6	25	7.6
																										80	5.5	40	2.8	7.0	17.8	11.0	27.9	15.0	38.1	27	8.2	

External Mix Wide Angle Flat Fan Pattern - 1/4 NPT

Model EB1010SS, EB1020SS, EB1030SS and EB1040SS

1/4 NPT external mix wide angle flat fan pattern nozzles are great where a high volume of liquid is needed over a wide area such as a conveyor line. Because they are external mix, airflow and liquid flow can be controlled independently. Common applications are those which require a moderate application of liquid over a broad area, such as cooling or coating wide webs.

For pressure fed applications with independent air and liquid control.



Model: EB1010SS
Material: Type 303 Stainless Steel



Model: EB1020SS
Material: Type 303 Stainless Steel



Model: EB1030SS
Material: Type 303 Stainless Steel



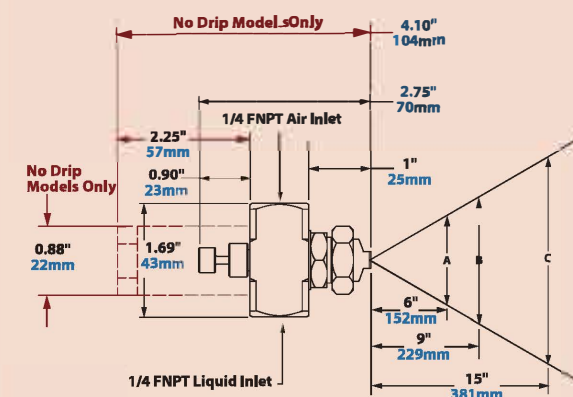
Model: EB1040SS
Material: Type 303 Stainless Steel



(2) Model EB1040SS nozzles are used to rinse wine bottles after capping.

Dimensions and Airflow Pattern

DOWNLOAD drawings at EXAIR.com



No Drip Only Dimensions in Red See page 81 for No Drip Atomizing Nozzles

For more information about droplet size and spray angle, see page 84.

Model	3 PSI/0.2 BAR Liquid				5 PSI/0.3 BAR Liquid				10 PSI/0.7 BAR Liquid				20 PSI/1.4 BAR Liquid				40 PSI/2.8 BAR Liquid				Spray Dimensions																					
	Air Pressure PSI/ BAR	GPH/ LPH	SCFM/ SLPM	Air Pressure PSI/ BAR	GPH/ LPH	SCFM/ SLPM	Air Pressure PSI/ BAR	GPH/ LPH	SCFM/ SLPM	Air Pressure PSI/ BAR	GPH/ LPH	SCFM/ SLPM	Air Pressure PSI/ BAR	GPH/ LPH	SCFM/ SLPM	Air Pressure PSI/ BAR	GPH/ LPH	SCFM/ SLPM	Pressure				Width						Max. Depth feet/m													
																			Air PSI/ BAR	Liquid PSI/ BAR	A	B	C																			
																				in	cm	in	cm	in	cm																	
EB1010SS	5	0.3		0.9	25.5	5	0.3		0.9	25.5	8	0.6		1.1	31.1	10	0.7		1.3	36.8	15	1.0		1.7	48.1	10	0.7	5	0.3	8.0	20.3	11.0	27.9	14.0	35.6	9	2.7					
	8	0.6	1.0	3.8	1.1	31.1	10	0.7		1.3	36.8	10	0.7		1.3	36.8	20	1.4		2.0	56.6	20	1.4		2.0	56.6	15	1.0	10	0.7	9.0	22.9	12.0	30.5	17.0	43.2	11	3.4				
	10	0.7		1.3	36.8	15	1.0	1.4	5.3	1.7	48.1	20	1.4	1.9	7.2	2.0	56.6	30	2.1	2.7	10.7	2.6	73.6	30	2.1	20	1.4	20	1.4	9.3	23.6	14.0	35.6	19.0	48.3	11	3.4					
	15	1.0		1.7	48.1	20	1.4		2.0	56.6	30	2.1		2.6	73.6	35	2.4		3.0	85.0	35	2.4		3.0	85.0	25	1.7	30	2.1	11.0	27.9	15.0	38.1	20.0	50.8	13	4.0					
EB1020SS	6	0.4		1.0	28.3	6	0.4		1.0	28.3	6	0.4		1.0	28.3	10	0.7		1.3	36.8	20	1.4		2.0	56.6	8	0.6	5	0.3	11.0	27.9	16.0	40.6	19.0	48.3	8	2.4					
	7	0.5	2.5	9.5	1.1	31.1	8	0.6	3.2	12.1	1.1	31.1	8	0.6	4.3	16.3	1.1	31.1	12	0.8	5.9	22.3	1.5	42.5	25	1.7	15	1.0	20	1.4	11.0	27.9	16.0	40.6	21.0	53.3	11	3.4				
	8	0.6		1.1	31.1	9	0.6		1.2	34.0	10	0.7		1.3	36.8	15	1.0		1.7	48.1	30	2.1		2.6	74.0	20	1.4	20	1.4	12.0	30.5	17.0	43.2	22.0	55.9	12	3.7					
	10	0.7		1.3	36.8	10	0.7		1.3	36.8	12	0.8		1.5	42.5	20	1.4		2.0	56.6	35	2.4		3.0	85.0	25	1.7	30	2.1	13.0	33.0	18.0	45.7	24.0	61.0	12	3.7					
EB1030SS	8	0.6		3.4	96.3	10	0.7		3.8	108	15	1.0		4.8	136	35	2.4		8.4	238	50	3.4		11.0	311	15	1.0	3	0.2	11.0	27.9	17.0	43.2	21.0	53.3	13	4.0					
	15	1.0	4.4	16.7	4.8	136	20	1.4	5.5	20.8	5.9	167	25	1.7	7.6	28.8	6.7	190	45	3.1	11.0	41.6	10.1	286	65	4.5			12.3	348	25	1.7	10	0.7	12.0	30.5	18.0	45.7	23.0	58.4	16	4.9
	20	1.4		5.9	167	25	1.7		6.7	190	35	2.4		8.4	238	55	3.8		11.7	331	85	5.9		15.7	445	60	4.1	30	2.1	14.0	35.6	18.0	45.7	24.0	61.0	21	6.4					
	25	1.7		6.7	190	30	2.1		7.6	215	40	2.8		9.3	263	60	4.1		12.0	340	95	6.5		16.8	476	70	4.8	40	2.8	14.0	35.6	18.0	45.7	24.0	61.0	30	9.1					
EB1040SS	10	0.7		3.8	108	15	1.0		4.8	136	25	1.7		6.7	190	45	3.1		10.1	286	75	5.2		13.7	388	30	2.1	5	0.3	13.0	33.0	19.0	48.3	24.0	61.0	17	5.2					
	15	1.0	10.0	37.9	4.8	136	20	1.4	13.5	51.1	5.9	167	30	2.1	18.8	71.2	7.6	215	50	3.4	27.6	104	11.0	311	85	5.9			15.7	445	45	3.1	20	1.4	14.0	35.6	20.0	50.8	26.0	66.0	19	5.8
	20	1.4		5.9	167	30	2.1		7.6	215	40	2.8		9.3	263	70	4.8		13.4	379	95	6.5		16.8	476	65	4.5	20	1.4	15.0	38.1	21.0	53.3	27.0	68.6	23	7.0					
	25	1.7		6.7	190	35	2.4		8.4	238	45	3.1		10.1	286	80	5.5		14.8	419	100	6.9		18.3	518	80	5.5	20	1.4	15.0	38.1	22.0	55.9	28.0	71.1	26	7.9					

Siphon Fed Round Pattern - 1/4 NPT



Model SR1010SS, SR1020SS, SR1030SS and SR1040SS

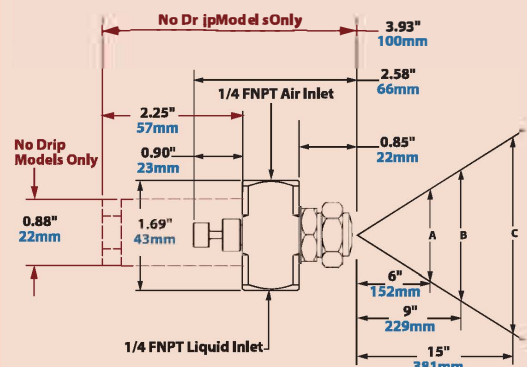
1/4 NPT siphon fed round pattern nozzles are great where no liquid pressure is available and a thin coating is needed at a specific area. Flow rate is adjustable via the adjusting valve. Siphon nozzles work best with a suction height of 36" (914mm) or less. Since these nozzles are siphon fed, the compressed airflow draws the liquid in and mixes it internally. Liquid flow is dependent both on the gravity or suction height and the airflow. Siphon fed round pattern nozzles provide the most liquid flow of any siphon fed nozzle.

Siphon or gravity fed for non-pressurized applications.



The SR1020SS has a focused, round pattern for precision application of coatings or coolant.

Dimensions and Airflow Pattern



For more information about droplet size and spray angle, see page 84.

Liquid Flow in GPH/LPH																			Spray Dimensions at 8" (20cm) Siphon Height											
Model	Air			Gravity Head							Siphon Height									Air		Width						Max. Depth feet/m		
	Pressure PSI/BAR	SCFM/SLPM		18"	46cm	12"	30cm	6"	15cm	4"	10cm	8"	20cm	12"	30cm	24"	61cm	36"	91cm	Pressure PSI/BAR	A in	cm	B in	cm	C in	cm				
SR1010SS	10	0.7	0.5	14.2	0.6	2.3	0.5	1.9	0.4	1.5	0.2	0.8	0.2	0.8	---	---	---	---	---	---	10	0.7	2.5	6	4.0	10	5.8	15	7	2.1
	20	1.4	0.7	19.8	0.6	2.3	0.6	2.3	0.5	1.9	0.4	1.5	0.4	1.5	0.3	1.1	---	---	---	---	20	1.4	3.3	8	4.3	11	6.0	15	9	2.7
	40	2.8	1.2	34.0	0.7	2.6	0.7	2.6	0.6	2.3	0.5	1.9	0.5	1.9	0.4	1.5	0.3	1.1	0.2	0.8	40	2.8	3.8	10	5.0	13	6.8	17	10	3.0
	60	4.1	1.6	45.3	0.8	3.0	0.8	3.0	0.7	2.6	0.6	2.3	0.5	1.9	0.5	1.9	0.4	1.5	0.2	0.8	60	4.1	3.8	10	5.0	13	6.8	17	11	3.4
SR1020SS	10	0.7	0.7	19.8	1.1	4.2	0.9	3.4	0.8	3.0	0.5	1.9	0.4	1.5	0.3	1.1	---	---	---	---	10	0.7	3.3	8	4.8	12	6.8	17	9	2.7
	20	1.4	1.1	31.1	1.3	4.9	1.1	4.2	1.0	3.8	0.8	3.0	0.7	2.6	0.6	2.3	0.3	1.1	---	---	20	1.4	3.5	9	5.0	13	7.0	18	11	3.4
	40	2.8	1.7	48.1	1.6	6.1	1.5	5.7	1.4	5.3	1.2	4.5	1.0	3.8	1.0	3.8	0.7	2.6	0.4	1.5	40	2.8	3.8	10	5.5	14	7.5	19	14	4.3
	60	4.1	2.3	65.0	1.9	7.2	1.7	6.4	1.6	6.1	1.4	5.3	1.2	4.5	1.2	4.5	0.9	3.4	0.5	1.9	60	4.1	4.0	10	5.8	15	8.0	20	16	4.9
SR1030SS	20	1.4	2.0	56.6	4.3	16.3	3.8	14.4	3.3	12.5	2.5	9.5	1.8	6.8	1.3	4.9	0.3	1.1	---	---	20	1.4	3.5	9	5.0	13	7.0	18	12	3.7
	40	2.8	3.2	90.6	5.0	18.9	4.4	16.7	4.0	15.1	3.3	12.5	2.9	11.0	2.5	9.5	1.3	4.9	1.0	3.8	40	2.8	3.8	10	5.3	13	7.5	19	13	4.0
	60	4.1	4.3	122	5.5	20.8	4.9	18.5	4.5	17.0	3.7	14.0	3.4	12.9	3.1	11.7	1.9	7.2	1.5	5.7	60	4.1	3.8	10	5.5	14	8.0	20	15	4.6
	80	5.5	5.6	158	5.8	22.0	5.3	20.1	4.9	18.5	4.1	15.5	3.9	14.8	3.7	14.0	2.6	9.8	1.7	6.4	80	5.5	4.0	10	5.8	15	8.3	21	18	5.5
SR1040SS	30	2.1	5.7	161	12.3	46.6	11.0	41.6	9.3	35.2	6.3	23.8	5.3	20.1	4.5	17.0	0.6	2.3	---	---	30	2.1	4.8	12	6.5	17	8.8	22	19	5.8
	40	2.8	6.9	195	13.0	49.2	11.8	44.7	10.0	37.9	7.3	27.6	6.5	24.6	5.5	20.8	1.5	5.7	0.3	1.1	40	2.8	5.2	13	7.0	18	9.3	24	21	6.4
	60	4.1	9.5	269	14.3	54.1	13.0	49.2	11.5	43.5	8.5	32.2	7.5	28.4	6.5	24.6	2.3	8.7	1.5	5.7	60	4.1	5.5	14	7.5	19	9.8	25	24	7.3
	80	5.5	12.0	340	15.0	56.8	13.5	51.1	12.5	47.3	9.5	36.0	8.5	32.2	7.5	28.4	3.5	13.2	1.9	7.2	80	5.5	5.8	15	7.8	20	10.0	25	27	8.2

Siphon Fed Flat Fan Pattern - 1/4 NPT



Model: SF1010SS
Material: Type 303 Stainless Steel



Model: SF1020SS
Material: Type 303 Stainless Steel



Model: SF1030SS
Material: Type 303 Stainless Steel

Model SF1010SS, SF1020SS and SF1030SS

1/4 NPT siphon fed flat fan pattern nozzles are great where no liquid pressure is available and a thin coating is needed over a wide band. Flow rate is adjustable via the adjusting valve. Siphon nozzles work best with a suction height of 36" (914mm) or less. Since these nozzles are siphon fed, the compressed airflow draws the liquid in and mixes it internally. Liquid flow is dependent both on the gravity or suction height and the airflow. Siphon fed flat fan pattern nozzles are the best choice where liquid is needed over a broad band such as a moving assembly line.

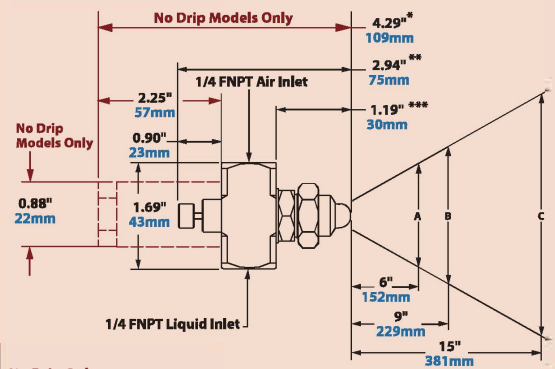
Siphon or gravity fed for non-pressurized applications.



A Model SF1020SS is used to apply a light coating of oil to prevent sockets from rusting prior to a packaging operation.

Dimensions and Airflow Pattern

DOWNLOAD drawings at EXAIR.com



No Drip Only
Dimensions
in Red
See page 81 for
No Drip Atomizing Nozzles

*Model SF2010SS: 4.15" / 105mm
**Model SF1010SS: 2.80" / 71mm
***Model SF1010SS: 1.05" / 27mm

For more information about droplet size and spray angle, see page 84.

Liquid Flow in GPH/LPH																			Spray Dimensions at 8" (20cm) Siphon Height											
Model	Air				Gravity Head						Siphon Height									Air		Width						Max. Depth feet/m		
	Pressure PSI/BAR		SCFM/ SLPM		18"	46cm	12"	30cm	6"	15cm	4"	10cm	8"	20cm	12"	30cm	24"	61cm	36"	91cm	Pressure PSI/BAR	A		B		C				
SF1010SS	10	0.7	0.9	25.5	0.4	1.5	0.3	1.1	0.3	1.1	0.2	0.8	0.2	0.8	0.2	0.8	0.2	0.8	0.1	0.4	10	0.7	9	23	11	28	13	33	5	1.5
	20	1.4	1.3	36.8	0.4	1.5	0.3	1.1	0.3	1.1	0.3	1.1	0.3	1.1	0.3	1.1	0.2	0.8	0.2	0.8	20	1.4	10	25	12	30	14	36	6	1.8
	30	2.1	1.7	48.1	0.3	1.1	0.3	1.1	0.3	1.1	0.3	1.1	0.3	1.1	---	---	---	---	---	---	30	2.1	11	28	13	33	15	38	7	2.1
SF1020SS	20	1.4	2.3	65.1	1.2	4.5	1.1	4.2	1.0	3.8	0.9	3.4	0.8	3.0	0.8	3.0	0.6	2.3	0.5	1.9	20	1.4	10	25	14	36	19	48	6	1.8
	30	2.1	2.9	82.1	1.1	4.2	1.1	4.2	1.0	3.8	0.8	3.0	0.8	3.0	0.8	3.0	0.6	2.3	0.5	1.9	30	2.1	11	28	15	38	21	53	7	2.1
	40	2.8	3.5	99.1	1.0	3.8	0.9	3.4	0.8	3.0	0.7	2.6	0.7	2.6	0.7	2.6	0.5	1.9	0.4	1.5	40	2.8	13	33	16	41	23	58	6	1.8
	50	3.4	4.3	122	0.8	3.0	0.7	2.6	0.5	1.9	0.5	1.9	0.4	1.5	0.3	1.1	---	---	---	---	50	3.4	14	36	18	46	25	64	6	1.8
SF1030SS	20	1.4	2.2	62.3	1.8	6.8	1.6	6.1	1.5	5.7	1.4	5.3	1.4	5.3	1.3	4.9	1.1	4.2	1.0	3.8	20	1.4	9	23	11	28	15	38	8	2.4
	30	2.1	2.8	79.2	1.9	7.2	1.8	6.8	1.8	6.8	1.7	6.4	1.7	6.4	1.6	6.1	1.4	5.3	1.2	4.5	30	2.1	10	25	13	33	17	43	9	2.7
	40	2.8	3.3	93.4	1.8	6.8	1.8	6.8	1.7	6.4	1.6	6.1	1.6	6.1	1.5	5.7	1.3	4.9	1.2	4.5	40	2.8	11	28	14	36	17	43	10	3.0
	50	3.4	4.0	113	1.6	6.1	1.5	5.7	1.4	5.3	1.4	5.3	1.3	4.9	1.3	4.9	1.1	4.2	1.0	3.8	50	3.4	11	28	14	36	18	46	11	3.4

Internal Mix Narrow Angle Round Pattern - 1/2 NPT

Model AN5010SS and AN5020SS

1/2 NPT internal mix narrow angle round pattern nozzles are excellent for spraying a concentrated mist of liquid. Because of the versatility of their adjustments, these larger atomizing nozzles can apply a heavy coat up close or send a very fine mist over 40 feet away! They are often used for higher volume application of lubricants during assembly, or marking items as they move through an assembly line.

For pressure fed applications not requiring independent air and liquid control.



Model: AN5010SS
Material: Type 303 Stainless Steel



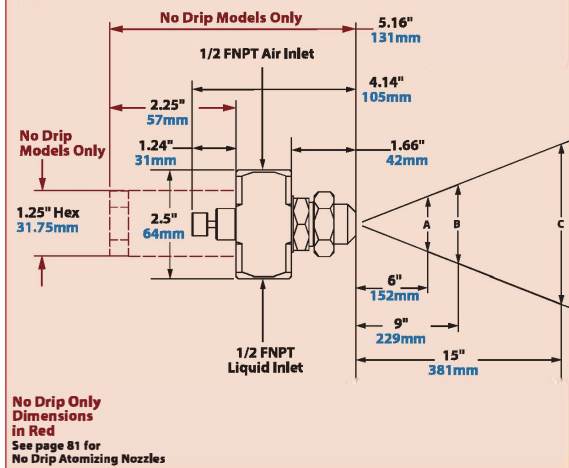
Model: AN5020SS
Material: Type 303 Stainless Steel



With adjustable liquid flow, these nozzles can be used to apply a heavy coat or a precise volume of liquid.

Dimensions and Airflow Pattern

DOWNLOAD drawings at EXAIR.com



For more information about droplet size and spray angle, see page 84.

For more information about droplet size and spray angle see page 84.

Spray Dimensions										
Model	Pressure				Width					
	Air PSI/BAR		Liquid PSI/BAR		in A		in B		in C	
AN5010SS	20	1.4	5	0.3	3.5	9	5.75	14.6	8.5	22
	36	2.5	15	1.0						
	50	3.4	25	1.7						
	60	4.1	35	2.4						
AN5020SS	10	0.7	5	0.3	4	10	6	15.2	8.5	22
	32	2.2	25	1.7	5.5	14	7.5	19.1	10	25
	44	3.0	35	2.4	6	15	9	22.9	10.5	27
	64	4.4	55	3.8	6	15	9	22.9	10.5	27

5 PSI/0.3 BAR Liquid						15 PSI/1.0 BAR Liquid						25 PSI/1.7 BAR Liquid						35 PSI/2.4 BAR Liquid						55 PSI/3.8 BAR Liquid						
Model	Air Pressure PSI/BAR		GPH/LPH		SCFM/SLPM		Air Pressure PSI/BAR		GPH/LPH		SCFM/SLPM		Air Pressure PSI/BAR		GPH/LPH		SCFM/SLPM		Air Pressure PSI/BAR		GPH/LPH		SCFM/SLPM		Air Pressure PSI/BAR		GPH/LPH		SCFM/SLPM	
AN5010SS	18	1.2	9	34.1	12	339.8	28	1.9	27	102.2	14.5	411	38	2.6	51.6	195.3	16.4	464	48	3.3	75.6	286	18.4	521						
	20	1.4	7	26.5	12.8	362.5	32	2.2	20	75.7	16.2	459	44	3.0	32.4	122.6	19.5	552	60	4.1	36.6	139	25.3	716						
	22	1.5	6	22.7	13.6	385.2	38	2.6	20	75.7	19	538	54	3.7	22	83.3	24.3	688	72	5.0	21.6	82	31.0	878						
	24	1.7	4.5	17.0	14.5	410.6	42	2.9	12.5	47.3	20.4	578	60	4.1	18	68.1	26.9	762	78	5.4	16.8	64	33.7	954						
AN5020SS	10	0.7	30	113.6	13.7	388.0	18	1.2	98.4	372.4	15.6	442	26	1.8	159	601.8	17.6	498	36	2.5	183	693	20.0	566	54	3.7	231	874.3	26.0	736
	12	0.8	18.6	70.4	16.2	458.8	20	1.4	73.2	277.1	17.9	507	32	2.2	99	374.7	23.7	671	42	2.9	126	477	26.1	739	60	4.1	168	635.9	33.4	946
							22	1.5	63.6	240.7	20.3	575	36	2.5	75	283.9	28.6	810	46	3.2	96	363	31.0	878	72	5.0	76	287.7	47.2	1337
							24	1.7	52.8	199.8	22.6	640	40	2.8	57.6	218.0	33.0	935	52	3.6	71	269	37.7	1068	76	5.2	54	204.4	51.3	1453

Internal Mix Wide Angle Round Pattern - 1/2 NPT

Model AW5010SS, AW5020SS and AW5030SS

EXAIR's 1/2 NPT internal mix wide angle round pattern atomizing nozzles are great for covering a broad area. These larger atomizing nozzles can be adjusted for a light mist or a heavy soaking spray. They are popular for dust mitigation, humidification, and cooling of products, people or livestock in a broad area. These nozzles are also perfect for applying a coating to parts packed in large containers, for example, misting a container of stamped steel parts with oil to prevent oxidation during shipment.

For pressure fed applications not requiring independent air and liquid control.

Model: AW5010SS

Material: Type 303 Stainless Steel

Spray Nozzles



Model: AW5020SS

Material: Type 303 Stainless Steel



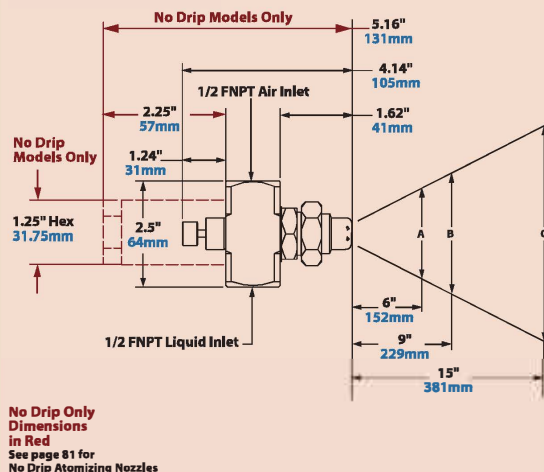
Model: AW5030SS

Material: Type 303 Stainless Steel



Dimensions and Airflow Pattern

DOWNLOAD drawings at EXAIR.com



For more information about droplet size and spray angle, see page 84.

Produce a large volume, fine mist or a hard hitting spray with these adjustable liquid nozzles.

5 PSI/0.3 BAR Liquid																		15 PSI/1.0 BAR Liquid						25 PSI/1.7 BAR Liquid						35 PSI/2.4 BAR Liquid						55 PSI/3.8 BAR Liquid						Spray Dimensions									
Model		Air Pressure PSI/BAR		GPH/ LPH		SCFM/ SLPM		Air Pressure PSI/BAR		GPH/ LPH		SCFM/ SLPM		Air Pressure PSI/BAR		GPH/ LPH		SCFM/ SLPM		Air Pressure PSI/BAR		GPH/ LPH		SCFM/ SLPM		Air Pressure PSI/BAR		GPH/ LPH		SCFM/ SLPM		Pressure			Width			Max. Depth feet/m													
																																Air PSI/ BAR	Liquid PSI/ BAR	A in cm	B in cm	C in cm															
AW5010SS	10	0.69	32	121	12.0	340	28	1.9	33	125	7.6	215	40	2.8	28.8	109	11.0	312	58	4.0	66	250	11.7	331	30	2.1	25	1.7	12.4	31.8	18	46	26	66	18	5.5															
	12	0.83	20.4	77	14.5	411	30	2.1	20.4	77	10.0	283	42	2.9	18	68	13.3	377	60	4.1	49	185	13.4	379	40	2.8	35	2.4	13	33.0	19	48	26	66	20	6.1															
	14	0.97	13.2	50	16.2	459	32	2.2	21	79	27.7	784	48	3.3	26.4	100	38.2	1082	62	4.3	36	136	16.8	476	60	4.1	55	3.8	14	35.6	19	48	26.5	67	22	6.7															
AW5020SS	10	0.69	32	121	12.0	340	26	1.8	36.8	139	21.8	617	40	2.8	60.6	229	29.9	847	54	3.7	70	265	37.4	1059	75	5.2	115	435	45.6	1291	12	0.8	5	0.3	15	38.1	19.5	50	25	64	22	6.7									
	12	0.83	20.4	77	14.5	411	30	2.1	28.8	109	25.6	725	44	3.0	40.8	154	33.5	949	58	4.0	49.2	186	41.2	1167	80	5.5	94	356	50.2	1422	46	3.2	25	1.7	16	40.6	20	51	25	64	35	10.7									
	14	0.97	13.2	50	16.2	459	32	2.2	21	79	27.7	784	48	3.3	26.4	100	38.2	1082	62	4.3	36	136	44.7	1266	60	4.1	35	2.4	15	38.1	18	46	22	56	40	12.2															
AW5030SS	10	0.69	31.2	118	12.8	362	18	1.2	112	424	14.6	413	26	1.8	180	681	17.0	481	36	2.5	210	795	21.2	600	54	3.7	264	999	28.2	799	10	0.7	5	0.3	16	40.6	21	53	31	79	20	6.1									
	12	0.83	18.6	70	15.1	542	20	1.4	87	329	16.5	467	30	2.1	138	522	20.6	583	40	2.8	177	670	25.0	708	62	4.3	216	818	36.0	1020	20	1.4	15	10	16	40.6	20.5	52	27	69	22	6.7									
	22	1.5	72	273	18.5	524	36	2.5	83.4	316	26.7	756	48	3.3	102	386	32.5	920	70	4.8	150	568	42.4	1201	44	3.0	35	2.4	13	33.0	17	43	22	56	35	10.7															
AW5030SS	24	1.7	60	227	20.4	578	40	2.8	61.2	232	31.0	878	52	3.6	82.2	311	36.7	1039	76	5.2	111	420	48.1	1362	64	4.4	55	3.8	13.3	34.3	17	43	22	56	44	13.4															

Internal Mix Flat Fan Pattern - 1/2 NPT



Model: AF5010SS

Material: Type 303 Stainless Steel



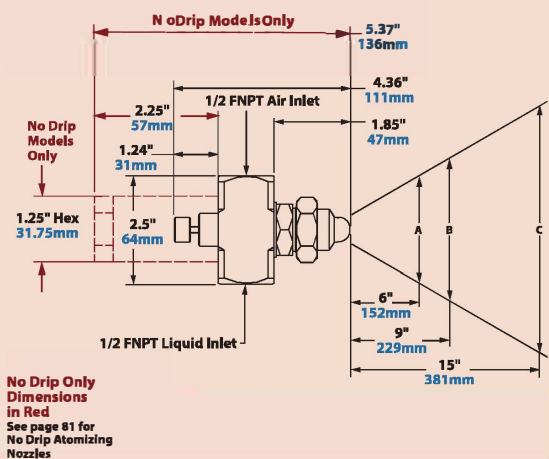
Model: AF5020SS

Material: Type 303 Stainless Steel



Use the adjustable liquid valve to apply just the right amount of liquid upon your application.

Dimensions and Airflow Pattern



For more information about droplet size and spray angle, see page 84.

Need Help Choosing The Best Atomizing Nozzle For Your Application?

Not sure which atomizing nozzle is required?

Our Application Engineers can assist you in determining the correct model.

Call 1-800-903-9247 to speak with an Application Engineer.

Spray Dimensions

[illegible]

		5 PSI/0.3 BAR Liquid						15 PSI/1.0 BAR Liquid						25 PSI/1.7 BAR Liquid						35 PSI/2.4 BAR Liquid						55 PSI/3.8 BAR Liquid					
Model	Air Pressure PSI/BAR	GPH/LPH		SCFM/SLPM		Air Pressure PSI/BAR	GPH/LPH		SCFM/SLPM		Air Pressure PSI/BAR	GPH/LPH		SCFM/SLPM		Air Pressure PSI/BAR	GPH/LPH		SCFM/SLPM		Air Pressure PSI/BAR	GPH/LPH		SCFM/SLPM							
		PSI	BAR	GPH	LPH		SCFM	SLPM	PSI	BAR		GPH	LPH	SCFM	SLPM		PSI	BAR	GPH	LPH		SCFM	SLPM	PSI	BAR	GPH	LPH	SCFM	SLPM		
AF5010SS							28	1.9	33.6	127	23.4	663	44	3.0	38.4	145	32.4	918	58	4.0	46.2	175	40.3	1141							
							30	2.1	25.2	95	25.3	716	48	3.3	35.8	136	36.2	1025	62	4.3	34.8	132	43.5	1232							
							34	2.3	12.6	48	28.7	813	50	3.4	18	68	38.0	1076	65	4.5	25.2	95	46.0	1303							
							36	2.5	11.5	44	31.2	884	60	4.1	3.5	13	46.0	1303	70	4.8	16.2	61	49.7	1408							
AF5020SS	10	0.69	18	68	18.0	510	18	1.2	87.6	332	15.6	442	26	1.8	150	568	17.9	507	36	2.5	177	670	22.3	632	54	3.7	231	874	29.3	830	
	12	0.83	6	23	6.0	170	20	1.4	62.4	236	18.4	521	30	2.1	99	375	22.3	632	40	2.8	132	500	26.6	753	60	4.1	186	704	35.6	1008	
							22	1.5	45.6	173	20.6	583	36	2.5	50.4	191	29.9	847	46	3.2	76.8	291	34.4	974	68	4.7	108	409	44.4	1257	
							24	1.7	30.6	116	23.3	660	40	2.8	26.4	100	35.2	997	52	3.6	38.4	145	41.5	1175	76	5.2	66	250	53.13	1505	

Internal Mix 360° Hollow Circular Pattern - 1/2 NPT



Model: AT5010SS

Material: Type 303 Stainless Steel

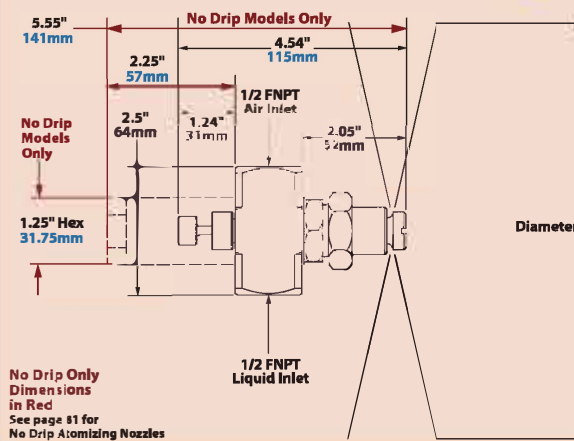
Model AT5010SS

1/2 NPT internal mix 360° nozzles are designed for applications where the spray pattern must be oriented away from the nozzle in all directions. These larger 360° nozzles are ideal where a smooth, even coating is needed on the ID of pipe or similar ductwork. They also work great for operations where a mist over a broad area is needed, such as dust suppression, humidification and cooling.

For pressure fed applications not requiring independent air and liquid control.

Dimensions and Airflow Pattern

DOWNLOAD drawings at EXAIR.com



For more information about droplet size and spray angle, see page 84.



360° circular pattern nozzles can be used to coat inside diameters or cover a broad area up to 13' (4m).

10 PSI/0.7 BAR Liquid								20 PSI/1.4 BAR Liquid					30 PSI/2.1 BAR Liquid					40 PSI/2.8 BAR Liquid					60 PSI/4.1 BAR Liquid					Spray Dimensions								
Model	Air Pressure PSI/BAR		GPH/LPH		SCFM/ SLPM		Air Pressure PSI/BAR		GPH/LPH		SCFM/ SLPM		Air Pressure PSI/BAR		GPH/LPH		SCFM/ SLPM		Air Pressure PSI/BAR		GPH/LPH		SCFM/ SLPM		Pressure		Diameter									
																									Air PSI/BAR	Liquid PSI/BAR		in	cm							
	AT5010SS	14	1.0	54	204	13.7	388	24	1.7	100	379	17.3	490	36	2.5	114	431	23.7	671	48	3.3	132	500	29.6	838	72	5.0	150	568	41.5	1175	16	1.1	10	0.7	56
	16	1.1	33.6	127	16.3	462	28	1.9	66	250	21.8	617	40	2.8	83	314	28.0	793	54	3.7	85	322	36.2	1025	76	5.2	120	454	45.6	1291	42	2.9	30	2.1	112	284
	18	1.2	16.8	64	18.5	524	32	2.2	32.5	123	26.7	756	46	3.2	38.4	145	34.6	980	60	4.1	42	159	42.7	1209	78	5.4	108	409	47.9	1357	56	3.9	40	2.8	144	366
	20	1.4	10.8	41	20.0	566	36	2.5	12	45	30.8	872	50	3.4	14.4	55	39.1	1107	66	4.6	15.6	59	49.9	1413	82	5.7	84	318	51.5	1458	80	5.5	60	4.1	156	396

External Mix Narrow Angle Flat Fan Pattern - 1/2 NPT



Model: EF5010SS

Material: Type 303 Stainless Steel

Model EF5010SS

1/2 NPT external mix narrow angle flat fan pattern nozzles are great where a high volume of liquid is needed over a concentrated area. Since they are external mix, airflow and liquid flow can be controlled independently. External mix narrow angle flat fan pattern nozzles are the best choice where thicker liquids for a heavy coating are needed over a narrow band, such as a paint line.

For pressure fed applications with independent air and liquid control.



External mix narrow angle flat fan nozzles provide a high volume of liquid in a concentrated area.

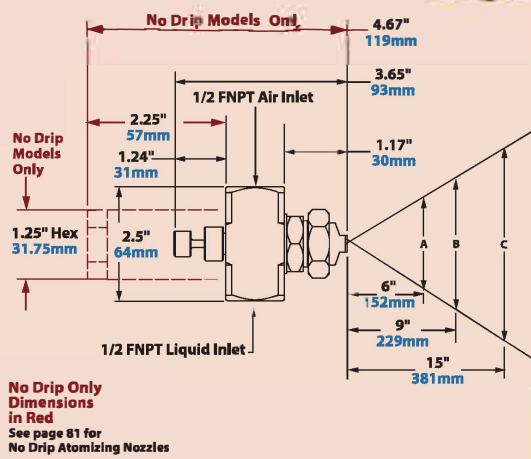
Mounting Brackets For Your Atomizing System



EXAIR's Model 901556 Mounting Bracket allows for easy positioning of all EXAIR 1/2 NPT Atomizing Nozzles.

Dimensions and Airflow Pattern

DOWNLOAD drawings at EXAIR.com



For more information about droplet size and spray angle, see page 84.

3 PSI/0.2 BAR Liquid						5 PSI/0.3 BAR Liquid						7 PSI/0.5 BAR Liquid						10 PSI/0.7 BAR Liquid						15 PSI/1.0 BAR Liquid						Spray Dimensions												
Model	Air Pressure PSI/ BAR	GPH/ LPH	SCFM/ SLPM		Air Pressure PSI/ BAR	GPH/ LPH	SCFM/ SLPM		Air Pressure PSI/ BAR	GPH/ LPH	SCFM/ SLPM		Air Pressure PSI/ BAR	GPH/ LPH	SCFM/ SLPM		Air Pressure PSI/ BAR	GPH/ LPH	SCFM/ SLPM		Pressure				Width					Max. Depth feet/m												
																					Air PSI/ BAR	Liquid PSI/ BAR	A	B	C																	
EF5010SS	30	2.1	141	534	40	2.8	186	704	45	3.1	218	825	55	3.8	264	999	60	4.1	303	1147	80	5.5	56.0	1586	35	2.4	3	0.2	15	38	18.5	47	22	56	25	7.6						
	35	2.4			40.4	1144			55	3.8			47.0	1331			60	4.1			49.75	1409	85	5.9	60.0	1699	50	3.4	5	0.3	15	38	19	48	23	58	31	9.4				
	40	2.8			37.3	1055			55	3.8			47.4	1342			60	4.1			49.5	1402	70	4.8	52.84	1496	90	6.2	61.4	1739	70	4.8	10	0.7	15	38	20	51	25	64	33	10.1
	45	3.1			40.8	1155			60	4.1			50.0	1416			70	4.8			56.8	1609	80	5.5	59.7	1691	100	6.9	67.6	1914	90	6.2	15	1.0	15	38	20	51	25	64	35	10.7

Siphon Fed Round Pattern - 1/2 NPT



Model: SR5010SS
Material: Type 303 Stainless Steel

Model SR5010SS

1/2 NPT siphon fed round pattern nozzles are great where no liquid pressure is available and a heavy coating is needed at a specific area. Flow rate of these larger atomizing nozzles is adjustable via the adjusting valve. Siphon nozzles work best with a suction height of 24" or less. Since these nozzles are siphon fed, the compressed airflow draws the liquid in and mixes it internally. Liquid flow is dependent both on the gravity or suction height and the airflow. 1/2 NPT siphon fed round pattern nozzles provide the most liquid flow of any siphon fed nozzle.

Siphon or gravity fed for non-pressurized applications.



Use a siphon fed nozzle when no liquid pressure is available.

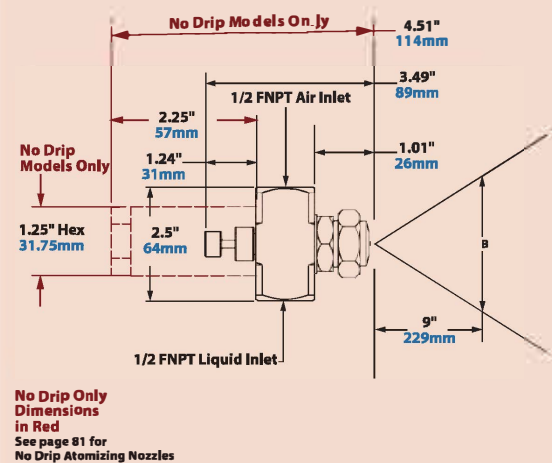
Air and Liquid Caps are Interchangeable!



Changing liquid volume and/or liquid air pattern can be done in the field. EXAIR's vast selection of caps are all interchangeable!

Dimensions and Airflow Pattern

DOWNLOAD drawings at EXAIR.com



For more information about droplet size and spray angle, see page 84.

Liquid Flow in GPH/LPH																	Spray Dimensions at 8" (20cm) Siphon Height								
Model	Air				Gravity Head						Siphon Height						Air		Width		Max. Depth feet/m				
	Pressure PSI/BAR		SCFM/ SLPM		18"	46cm	12"	30cm	6"	15cm	4"	10cm	8"	20cm	12"	30cm	24"	61cm	Pressure PSI/BAR	in		cm			
SR5010SS	20	1.4	19.3	547							22.1	84	14.3	54					20	1.4	6	15	22	6.7	
	30	2.1	25.2	714							28.6	108	25.7	97	12.3	47			30	2.1			25	7.6	
	40	2.8	32.8	929				56.8	215	41	155	31.5	119	28.4	107	19.6	74			40			2.8	28	8.5
	50	3.4	36.7	1039	61	231	57.4	217	42.8	162	32.1	121	30.2	114	21.8	83			50	3.4			29	8.8	
	60	4.1	42.2	1195	59.1	224	57.4	217	43.8	166	33.1	125	33	125	25.7	97	9.9	37	60	4.1			31	9.4	
	70	4.8	47.7	1351	66	250	58.6	222	43.8	166	35.3	134	35.3	134	29.7	112	12.5	47	70	4.8			35	10.7	
	80	5.5	52.9	1498	68.3	259	59.1	224	44.5	168	44.6	169	36.9	140	31.5	119	17.5	66	80	5.5			37	11.3	



No Drip Atomizing Nozzles

An **INTELLIGENT**
COMPRESSED AIR®
Product

No Drip Atomizing Spray Nozzles

Eliminate drips to conserve valuable liquids and improve product finishes!



What Are No Drip Atomizing Nozzles?

EXAIR's patented[†] no drip atomizing spray nozzles work in the same way our standard atomizing nozzles do, but have the added benefit of positively stopping liquid flow when compressed air is shut off. All models use stainless steel construction for durability and corrosion resistance.

EXAIR's no drip atomizing nozzles are available in 3 basic families:

Internal Mix:

Internal mix nozzles mix the liquid and water inside the air cap and produce the finest atomization. Internal mix nozzles can be used on liquids with a viscosity up to 300 cP. Both air and liquid sides are pressure fed. **No Drip Internal Mix Atomizing Nozzles are for pressure fed applications not requiring independent air and liquid control.**

External Mix:

External mix nozzles have the highest flow rates and allow the air and liquid flows to be adjusted independently. These nozzles are best where precise liquid flow is needed. External mix nozzles can be used on liquids with a viscosity above 300 cP. Both air and liquid sides are pressure fed. **No Drip External Mix Atomizing Nozzles are for pressure fed applications with independent air and liquid control.**

Siphon Fed:

Siphon fed nozzles require no liquid pressure and can be used with gravity fed liquids or lift liquids from a siphon height as much as 36 inches (91cm). Siphon fed nozzles can be used on liquids with a viscosity up to 200 cP. **No Drip Siphon Fed Atomizing Nozzles are siphon or gravity fed for non-pressurized applications.**

Why No Drip Atomizing Nozzles?

When spraying any type of liquid, post spray liquid flow can cause big problems. Unwanted drips can ruin product finishes on painted or coated surfaces. In addition, excess liquid flow wastes precious resources such as expensive coatings, chemicals or water. EXAIR's no drip atomizing nozzles are ideal where no post-spray drip is permissible. When the compressed air supply is shut off, the no drip nozzle positively seals off the flow of liquid eliminating the possibility of drips. They can be used in any situation that our standard atomizing nozzles can be used, including Siphon Fed applications. Unlike some manufacturers, there's no need to run a separate air line to control the no drip mechanism. The same compressed air used to combine and atomize liquid in a variety of patterns is used to open a valve allowing liquid to flow. That makes these ideal for use with EXAIR's money and energy saving EFC (see page 7).

EXAIR's no drip nozzles do not change flow rates from standard atomizing nozzles. Operations that require up to 180 cycles per minute can be achieved. Minimum operating air pressure of 30 PSIG (2.1 BAR) required.



Mounting Brackets are available - Model 901318 for 1/4 NPT and Model 901556 for 1/2 NPT atomizing nozzles.

[†] Patent #9156045

Applications

- Painting
- Coating
- Rinsing
- Cooling
- Quenching
- Wetting (moistening)
- Humidification
- Dust Control

Advantages

- No post spray drip
- Adjustable
- Easily used with an EFC
- Minimizes air and liquid consumption
- All stainless steel construction
- Fine atomization
- Interchangeable liquid and air caps
- Compact



No Drip Internal Mix Atomizing Nozzles are for pressure fed applications not requiring independent air and liquid control.



NO DRIP INTERNAL MIX ATOMIZING NOZZLES

Model	Description
No Drip Internal Mix Narrow Angle Round Pattern Atomizing Nozzles	
AN2010SS	No Drip Internal Mix Narrow Angle Round Pattern Atomizing Nozzles, 3.3 GPH/12.5 LPH Max, 1/4 NPT
AN2020SS	No Drip Internal Mix Narrow Angle Round Pattern Atomizing Nozzles, 9.9 GPH/37.5 LPH Max, 1/4 NPT
AN2030SS	No Drip Internal Mix Narrow Angle Round Pattern Atomizing Nozzles, 23.0 GPH/87.1 LPH Max, 1/4 NPT
AN2040SS	No Drip Internal Mix Narrow Angle Round Pattern Atomizing Nozzles, 66.0 GPH/250 LPH Max, 1/4 NPT
AN6010SS	No Drip Internal Mix Narrow Angle Round Pattern Atomizing Nozzles, 75.6 GPH/286 LPH Max, 1/2 NPT
AN6020SS	No Drip Internal Mix Narrow Angle Round Pattern Atomizing Nozzles, 231.0 GPH/874 LPH Max, 1/2 NPT
No Drip Internal Mix Wide Angle Round Pattern Atomizing Nozzles	
AW2010SS	No Drip Internal Mix Wide Angle Round Pattern Atomizing Nozzles, 3.5 GPH/13.2 LPH Max, 1/4 NPT
AW2020SS	No Drip Internal Mix Wide Angle Round Pattern Atomizing Nozzles, 8.5 GPH/32.2 LPH Max, 1/4 NPT
AW2030SS	No Drip Internal Mix Wide Angle Round Pattern Atomizing Nozzles, 15.0 GPH/56.8 LPH Max, 1/4 NPT
AW2040SS	No Drip Internal Mix Wide Angle Round Pattern Atomizing Nozzles, 24.0 GPH/91 LPH Max, 1/4 NPT
AW6010SS	No Drip Internal Mix Wide Angle Round Pattern Atomizing Nozzles, 66.0 GPH/250 LPH Max, 1/2 NPT
AW6020SS	No Drip Internal Mix Wide Angle Round Pattern Atomizing Nozzles, 115.0 GPH/435 LPH Max, 1/2 NPT
AW6030SS	No Drip Internal Mix Wide Angle Round Pattern Atomizing Nozzles, 264.0 GPH/999 LPH Max, 1/2 NPT
No Drip Internal Mix Flat Fan Pattern Atomizing Nozzles	
AF2010SS	No Drip Internal Mix Flat Fan Pattern Atomizing Nozzles, 3.2 GPH/12.1 LPH Max, 1/4 NPT
AF2020SS	No Drip Internal Mix Flat Fan Pattern Atomizing Nozzles, 4.7 GPH/17.8 LPH Max, 1/4 NPT
AF2030SS	No Drip Internal Mix Flat Fan Pattern Atomizing Nozzles, 11.0 GPH/41.6 LPH Max, 1/4 NPT
AF2040SS	No Drip Internal Mix Flat Fan Pattern Atomizing Nozzles, 18.3 GPH/69.3 LPH Max, 1/4 NPT
AF2050SS	No Drip Internal Mix Flat Fan Pattern Atomizing Nozzles, 42.0 GPH/159 LPH Max, 1/4 NPT
AF6010SS	No Drip Internal Mix Flat Fan Pattern Atomizing Nozzles, 46.2 GPH/175 LPH Max, 1/2 NPT
AF6020SS	No Drip Internal Mix Flat Fan Pattern Atomizing Nozzles, 231.0 GPH/874 LPH Max, 1/2 NPT
No Drip Internal Mix Deflected Flat Fan Pattern Atomizing Nozzles	
AD2010SS	No Drip Internal Mix Deflected Flat Fan Pattern Atomizing Nozzles, 6.9 GPH/26 LPH Max, 1/4 NPT
No Drip Internal Mix 360° Hollow Circular Pattern Atomizing Nozzles	
AT2010SS	No Drip Internal Mix 360° Hollow Circular Pattern Atomizing Nozzles, 14.7 GPH/55.7 LPH Max, 1/4 NPT
AT6010SS	No Drip Internal Mix 360° Hollow Circular Pattern Atomizing Nozzles, 150 GPH/568 LPH Max, 1/2 NPT

No Drip External Mix Atomizing Nozzles are for pressure fed applications with independent air and liquid control.



No Drip Siphon Fed Atomizing Nozzles are siphon or gravity fed for non-pressurized applications.



NO DRIP EXTERNAL MIX ATOMIZING NOZZLES

Model	Description
No Drip External Mix Round Pattern Atomizing Nozzles	
ER2010SS	No Drip External Mix Round Pattern Atomizing Nozzles, 3.8 GPH/14.4 LPH Max, 1/4 NPT
ER2020SS	No Drip External Mix Round Pattern Atomizing Nozzles, 7.5 GPH/28.4 LPH Max, 1/4 NPT
ER2030SS	No Drip External Mix Round Pattern Atomizing Nozzles, 14.0 GPH/53.0 LPH Max, 1/4 NPT
ER2040SS	No Drip External Mix Round Pattern Atomizing Nozzles, 31.0 GPH/117 LPH Max, 1/4 NPT
ER2050SS	No Drip External Mix Round Pattern Atomizing Nozzles, 60.0 GPH/227 LPH Max, 1/4 NPT
No Drip External Mix Narrow Angle Flat Fan Pattern Atomizing Nozzles	
EF2010SS	No Drip External Mix Narrow Angle Flat Fan Pattern Atomizing Nozzles, 3.8 GPH/14.4 LPH Max, 1/4 NPT
EF2020SS	No Drip External Mix Narrow Angle Flat Fan Pattern Atomizing Nozzles, 7.5 GPH/28.4 LPH Max, 1/4 NPT
EF2030SS	No Drip External Mix Narrow Angle Flat Fan Pattern Atomizing Nozzles, 14.0 GPH/53.0 LPH Max, 1/4 NPT
EF2040SS	No Drip External Mix Narrow Angle Flat Fan Pattern Atomizing Nozzles, 31.0 GPH/117 LPH Max, 1/4 NPT
EF6010SS	No Drip External Mix Narrow Angle Flat Fan Pattern Atomizing Nozzles, 303.0 GPH/1,147 LPH Max, 1/2 NPT
No Drip External Mix Wide Angle Flat Fan Pattern Atomizing Nozzles	
EB2010SS	No Drip External Mix Wide Angle Flat Fan Pattern Atomizing Nozzles, 3.8 GPH/14.4 LPH Max, 1/4 NPT
EB2020SS	No Drip External Mix Wide Angle Flat Fan Pattern Atomizing Nozzles, 7.5 GPH/28.4 LPH Max, 1/4 NPT
EB2030SS	No Drip External Mix Wide Angle Flat Fan Pattern Atomizing Nozzles, 14.0 GPH/53.0 LPH Max, 1/4 NPT
EB2040SS	No Drip External Mix Wide Angle Flat Fan Pattern Atomizing Nozzles, 31.0 GPH/117 LPH Max, 1/4 NPT
No Drip Siphon Fed Round Pattern Atomizing Nozzles	
SR2010SS	No Drip Siphon Fed Round Pattern Atomizing Nozzles, 0.8 GPH/3.0 LPH Max, 1/4 NPT
SR2020SS	No Drip Siphon Fed Round Pattern Atomizing Nozzles, 1.9 GPH/7.2 LPH Max, 1/4 NPT
SR2030SS	No Drip Siphon Fed Round Pattern Atomizing Nozzles, 5.8 GPH/22.0 LPH Max, 1/4 NPT
SR2040SS	No Drip Siphon Fed Round Pattern Atomizing Nozzles, 15.0 GPH/56.8 LPH Max, 1/4 NPT
SR6010SS	No Drip Siphon Fed Round Pattern Atomizing Nozzles, 68.3 GPH/259 LPH Max, 1/2 NPT
No Drip Siphon Fed Flat Fan Pattern Atomizing Nozzles	
SF2010SS	No Drip Siphon Fed Flat Fan Pattern Atomizing Nozzles, 0.4 GPH/1.5 LPH Max, 1/4 NPT
SF2020SS	No Drip Siphon Fed Flat Fan Pattern Atomizing Nozzles, 1.2 GPH/4.5 LPH Max, 1/4 NPT
SF2030SS	No Drip Siphon Fed Flat Fan Pattern Atomizing Nozzles, 1.9 GPH/7.2 LPH Max, 1/4 NPT

NO DRIP SIPHON FED ATOMIZING NOZZLES



Droplet Size

One of the primary reasons atomizing spray nozzles are used is because of their fine droplet size. Benefits of fine droplet size include even coating and liquid conservation. For reference, a large raindrop is around 6,000 microns (0.236") in diameter. Standard liquid nozzles produce droplet sizes ranging from 4,000 microns (0.157") down to 300 microns (0.012") in diameter. EXAIR's Atomizing Nozzles produce minuscule droplet sizes in the range of 100 microns (0.004") to 20 microns (0.0008")!

Droplet size can be adjusted by varying either the air or liquid pressure. An increase in air pressure or decrease in liquid pressure will generally produce a smaller droplet size. Below is a chart showing various models of atomizing air nozzles and their droplet sizes at selected pressures.

Droplet Size			
Model	Liquid Pressure	Air Pressure	Droplet Size μm^*
AN1020SS	20 PSI	40 PSI	71
	40 PSI	65 PSI	83
ER1020SS	5 PSI	40 PSI	39
	20 PSI	40 PSI	57
SR1020SS	4" Siphon Height	20 PSI	25
	4" Siphon Height	40 PSI	22

* Volume Median Diameter $D_v(50.0)$ of liquid droplets.
 $1 \mu\text{m} = 1 \text{ micron} = 0.00004"$. All tests performed with water.

Spray Angle

The Spray Angle is the trigonometric angle created by the width of the spray pattern and the distance at which it is measured. This angle can vary greatly within a given family of atomizing nozzles depending on flow rates and pressures, but will generally fall into the ranges below:

Spray Angle		
Family	Minimum Angle	Maximum Angle
Internal Mix Narrow Angle Round Pattern - AN1010SS, AN2010SS, etc.	20	45
Internal Mix Wide Angle Round Pattern - AW1010SS, AW2010SS, etc.	50	90
Internal Mix Flat Fan Pattern - AF1010SS, AF2010SS, etc.	50	120
External Mix Round Pattern - ER1010SS, ER2010SS, etc.	25	60
External Mix Narrow Angle Flat Fan Pattern - EF1010SS, EF2010SS, etc.	35	70
External Mix Wide Angle Flat Fan Pattern - EB1010SS, EB2010SS, etc.	50	105
Siphon Fed Round Pattern - SR1010SS, SR2010SS, etc.	20	50
Siphon Fed Flat Fan Pattern - SF1010SS, SF2010SS, etc.	50	100