Air 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 1/8 NPT, 1/4 NPT and 1/2 NPT sizes.

Built to Last 5 yr. WARRANTY

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 901786 for 1/8 NPT, 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 97.

For Technical Assistance, Call An EXAIR Application Engineer 1-800-903-9247
Toll Free FAX (866) 329-3924 • E-mail: techelp@exair.com • www.exair.com
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An INTELLIGENT COMPRESSED AIR® Product

Internal Mix Narrow Angle Round Pattern - 1/8 NPT

Model: AN8010SS
Material: Type 303 Stainless Steel

Model: AN8020SS
Material: Type 303 Stainless Steel

Model: AN8030SS
Material: Type 303 Stainless Steel

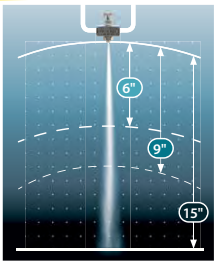
Model: AN8040SS
Material: Type 303 Stainless Steel

Model: AN8050SS
Material: Type 303 Stainless Steel

Model AN8010SS, AN8020SS, AN8030SS, AN8040SS and AN8050SS

1/8 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 16 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 1/8 NPT internal mix atomizing nozzles.

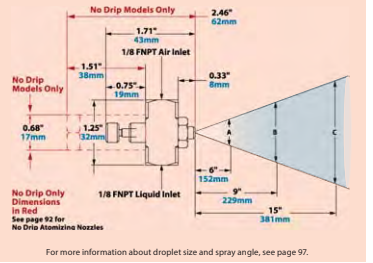
For pressure fed applications not requiring independent air and liquid control.



The modifiable spray pattern can generate a heavy or precision engineered mist for distances over 16 feet!

Dimensions and Airflow Pattern

DOWNLOAD drawings at EXAIR.com



For more information about droplet size and spray angle, see page 97.

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		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	
AN8010SS	10	0.7	0.97	3.7	0.25	7.1	14	1.0	1.83	6.9	0.32	9.1	24	1.7	1.97	7.5	0.52	14.7	32	2.2	2.23	8.4	0.67	19.0	50	3.4	2.63	10.0	0.98	27.7	10	0.7	10	0.7	3	8	3.5	9	4.5	11	3.5	1.1
	12	0.8	0.80	3.0	0.32	9.1	18	1.2	1.5	5.7	0.39	11.0	28	1.9	1.7	6.4	0.59	16.7	36	2.5	1.97	7.5	0.74	20.9	54	3.7	2.37	9.0	1.02	28.9	18	1.2	20	1.4	3	8	4	10	5	13	5	1.5
	14	1.0	0.60	2.3	0.4	11.3	22	1.5	1.27	4.8	0.52	14.7	32	2.2	1.37	5.2	0.71	20.1	40	2.8	1.67	6.3	0.84	23.8	58	4.0	2.1	7.9	1.12	31.7	32	2.2	30	2.1	3	8	4	10	5.5	14	7	2.1
	—	—	—	—	—	—	26	1.8	0.73	2.8	0.67	19.0	38	2.6	0.8	3.0	0.93	26.3	48	3.3	1.00	3.8	1.09	30.9	66	4.6	1.7	6.4	1.21	34.3	48	3.3	40	2.8	3	8	4.5	11	6	15	8	2.4
AN8020SS	10	0.7	1.33	5.0	0.43	12.2	18	1.2	1.83	6.9	0.71	20.1	24	1.7	2.27	8.6	0.91	25.8	30	2.1	2.63	10.0	1.05	29.7	40	2.8	3.33	12.6	1.31	37.1	10	0.7	10	0.7	2	5	3	8	4	10	5	1.5
	12	0.8	1.17	4.4	0.5	14.2	20	1.4	1.73	6.5	0.75	21.2	28	1.9	2.07	7.8	0.99	28.0	34	2.3	2.47	9.3	1.12	31.7	46	3.2	3.13	11.8	1.4	39.6	20	1.4	20	1.4	2.5	6	3.5	9	4.5	11	7	2.1
	14	1.0	1.03	3.9	0.6	17.0	22	1.5	1.63	6.2	0.84	23.8	32	2.2	1.9	7.2	1.09	30.9	38	2.6	2.33	8.8	1.20	34.0	52	3.6	2.87	10.9	1.6	45.3	32	2.2	30	2.1	2.5	6	3.5	9	4.5	11	7	2.1
	—	—	—	—	—	—	—	—	—	—	—	—	40	2.8	1.57	5.9	1.45	41.0	48	3.3	1.87	7.1	1.53	43.3	70	4.8	2.2	8.3	2.2	62.3	70	4.8	60	4.1	3.5	9	4.5	11	6.5	17	10	3.0
AN8030SS	12	0.8	2.20	8.3	0.47	13.3	22	1.5	2.9	11.0	0.75	21.2	30	2.1	3.7	14.0	0.96	27.2	36	2.5	4.47	16.9	1.09	30.9	48	3.3	6.3	23.8	1.28	36.2	12	0.8	10	0.7	2	5	3	8	4.5	11	6	1.8
	16	1.1	1.60	6.1	0.56	15.9	26	1.8	2.43	9.2	0.82	23.2	34	2.3	3.2	12.1	1.00	28.3	40	2.8	4.17	15.8	1.12	31.7	52	3.6	5.87	22.2	1.3	36.8	26	1.8	20	1.4	2.5	6	3.5	9	5	13	6	1.8
	24	1.7	0.67	2.5	0.95	26.9	38	2.6	1.13	4.3	1.35	38.2	46	3.2	1.8	6.8	1.45	41.0	52	3.6	2.67	10.1	1.49	42.2	64	4.4	4.56	17.3	1.59	45.0	52	3.6	40	2.8	3	8	4	10	6	15	11	3.4
	28	1.9	0.47	1.8	1.07	30.3	42	2.9	0.77	2.9	1.53	43.3	52	3.6	1.4	5.3	1.76	49.8	60	4.1	2.00	7.6	1.87	52.9	70	4.8	3.8	14.4	1.84	52.1	70	4.8	60	4.1	4	10	5	13	6.5	17	11	3.4
AN8040SS	16	1.1	4.87	9.6	2.54	71.9	28	1.9	6.60	25.0	3.64	103.0	40	2.8	7.83	29.7	4.70	132.9	48	3.3	9.33	35.3	5.40	153	65	4.5	12.0	45.4	6.70	190	16	1.1	10	0.7	2.5	6	3	8	4	10	10	3.0
	20	1.4	3.57	11.0	2.92	82.6	32	2.2	5.60	21.2	3.98	112.6	44	3.0	6.87	26.0	4.99	141.3	55	3.8	8.17	30.9	5.98	169	75	5.2	10.8	41.0	7.57	214	32	2.2	20	1.4	3	8	4	10	5.5	14	11	3.4
	26	1.8	1.87	13.6	3.60	101.8	44	3.0	2.43	9.2	5.16	146.1	60	4.1	2.80	10.6	6.43	182.0	80	5.5	2.53	9.6	8.58	243	90	6.2	8.17	30.9	9.03	256	80	5.5	40	2.8	3	8	4	10	5.5	14	13	4.0
	30	2.1	1.03	15.4	4.06	115.0	50	3.4	1.33	5.0	5.92	167.7	70	4.8	1.23	4.7	7.78	220.4	90	6.2	1.27	4.8	9.61	272	100	6.9	6.13	23.2	9.90	280	100	6.9	60	4.1	3.5	9	4.5	11	6	15	15	4.6
AN8050SS	12	0.8	7.60	28.8	1.76	49.8	20	1.4	11.63	44.0	2.37	67.1	30	2.1	13.5	51.1	3.42	96.8	38	2.6	15.4	58.2	3.99	113	54	3.7	18.9	71.7	5.17	146	12	0.8	10	0.7	3	8	4	10	6	15	9	2.7
	14	1.0	6.10	23.1	1.97	55.8	22	1.5	10.53	39.9	2.85	80.7	34	2.3	11.37	43.0	3.92	111.0	42	2.9	14.1	53.3	4.50	127	60	4.1	17.2	65.1	5.83	165	22	1.5	20	1.4	3	8	4	10	6	15	11	3.4
	16	1.1	4.80	18.2	2.18	61.7	24	1.7	9.43	35.7	3.11	88.0	38	2.6	9.07	34.3	4.4	124.6	46	3.2	12.3	46.7	4.95	140	65	4.5	15.7	59.4	6.45	183	38	2.6	30	2.1	3	8	4.5	11	6	15	14	4.3
	—	—	—	—	—	—	32	2.2	5.07	19.2	4.19	118.6	46	3.2	5.6	21.2	5.52	156.3	56	3.9	7.7	29.0	6.24	177	85	5.9	8.13	30.8	8.58	243	85	5.9	60	4.1	4	10	5	13	6.5	17	16	4.9

Air Atomizing Spray Nozzles

Internal Mix Wide Angle Round Pattern - 1/8 NPT

Model: AW8010SS
Material: Type 303 Stainless Steel

Model: AW8020SS
Material: Type 303 Stainless Steel

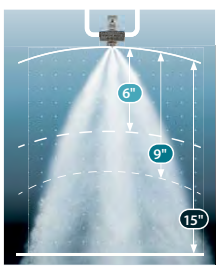
Model: AW8030SS
Material: Type 303 Stainless Steel

Model: AW8040SS
Material: Type 303 Stainless Steel

Model AW8010SS, AW8020SS, AW8030SS and AW8040SS

EXAIR's 1/8 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 prior to shipment.

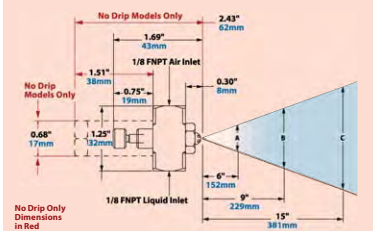
For pressure fed applications not requiring independent air and liquid control.



1/8 NPT Internal Mix Wide Angle Round Pattern atomizing nozzles are perfect for covering broad areas. They are ideal for dust migration, humidification and a variety of cooling applications.

Dimensions and Airflow Pattern

DOWNLOAD drawings at EXAIR.com



For more information about droplet size and spray angle, see page 97.

Model	10 PSI/0.7 BAR Liquid: Air Pressure PSI/BAR	GPH/ LPH	SCFM/ SLPM	20 PSI/1.4 BAR Liquid: Air Pressure PSI/BAR	GPH/ LPH	SCFM/ SLPM	30 PSI/2.1 BAR Liquid: Air Pressure PSI/BAR	GPH/ LPH	SCFM/ SLPM	40 PSI/2.8 BAR Liquid: Air Pressure PSI/BAR	GPH/ LPH	SCFM/ SLPM	60 PSI/4.1 BAR Liquid: Air Pressure PSI/BAR	GPH/ LPH	SCFM/ SLPM	Spray Dimensions: Pressure Air PSI/ BAR	Pressure Liquid PSI/ BAR	Width A in	Width A cm	Width B in	Width B cm	Width C in	Width C cm	Max. Depth feet/m
AW8010SS	8	0.6	1.10	4.2	0.31	8.8	14	1.0	1.60	6.1	0.33	9.4	22	1.5	2.00	7.6	0.43	12.3	30	2.1	2.00	7.6	0.61	17.2	44	3.0	2.60	9.8	0.69	19.7	8	0.6	10	0.7	5	13	6.5	17	7.5	19	2	0.6
	10	0.7	0.70	2.6	0.27	7.6	16	1.1	1.40	5.3	0.43	12.1	26	1.8	1.80	6.8	0.52	14.7	34	2.3	1.80	6.8	0.65	18.4	48	3.3	2.20	8.3	0.87	24.6	16	1.1	20	1.4	6	15	8	20	10	25	3	0.9
	—	—	—	—	—	—	22	1.5	0.60	2.3	0.60	16.9	—	—	—	—	—	—	—	—	—	—	—	—	65	4.5	0.60	2.3	1.56	44.2	26	1.8	30	2.1	7	18	9.0	23	11	28	4	1.2
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	65	4.5	60	4.1	7	18	10	25	12	30	4	1.2
AW8020SS	12	0.8	3.73	14.1	1.65	46.7	22	1.5	5.07	19.2	2.28	64.7	30	2.1	6.40	24.2	2.67	75.4	38	2.6	8.00	30.3	3.05	86.2	54	3.7	9.83	37.2	3.81	108	12	0.8	10	0.7	8	20	9.5	24	11	28	6	1.8
	14	1.0	3.00	11.4	1.90	53.9	24	1.7	4.43	16.8	2.54	71.9	32	2.2	6.00	22.7	2.92	82.6	42	2.9	6.73	25.5	3.55	100.6	56	3.9	9.33	35.3	4.06	115	24	1.7	20	1.4	8	20	10	25	13	33	8	2.4
	—	—	—	—	—	—	26	1.8	3.83	14.5	2.79	79.0	36	2.5	4.93	18.7	3.43	97.0	46	3.2	5.77	21.8	4.06	115.0	60	4.1	8.33	31.5	4.57	129	36	2.5	30	2.1	8	20	10	25	13	33	10	3.0
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	52	3.6	4.27	16.2	4.82	136.5	75	5.2	5.47	20.7	6.47	183	75	5.2	60	4.1	8	20	10	25	13	33	14	4.3
AW8030SS	10	0.7	6.37	24.1	1.3	36.8	20	1.4	7.87	29.8	1.87	52.8	30	2.1	10.0	37.9	2.52	71.3	40	2.8	11.3	42.9	3.04	86.0	56	3.9	15.0	56.8	3.21	90.9	12	0.8	10	0.7	7.5	19	10	25	13.5	34	8	2.3
	12	0.8	5.10	19.3	1.65	46.7	22	1.5	6.73	25.5	2.17	61.4	32	2.2	9.33	35.3	2.73	77.4	42	2.9	10.3	39.1	3.30	93.4	58	4.0	14.5	54.9	3.91	111	22	1.5	20	1.4	7.5	19	10	25	13.5	34	9	2.7
	14	1.0	3.47	13.1	1.91	54.1	24	1.7	5.93	22.5	2.43	68.8	36	2.5	6.83	25.9	3.39	95.8	46	3.2	8.33	31.5	3.95	111.8	65	4.5	12.0	45.4	4.90	139	36	2.5	30	2.1	7.5	19	10	25	13.5	34	10	3.0
	—	—	—	—	—	—	26	1.8	4.80	18.2	2.65	75.0	40	2.8	4.07	15.4	4.04	114.3	50	3.4	5.80	22.0	4.47	126.6	75	5.2	6.73	25.5	6.38	181	50	3.4	40	2.8	7.5	19	10	25	13.5	34	11	3.4
AW8040SS	18	1.2	11.3	42.9	2.89	81.8	30	2.1	14.5	54.9	4.16	117.8	44	3.0	16.3	61.8	5.53	156.5	60	4.1	18.0	68.1	7.04	199.3	80	5.5	22.3	84.5	8.89	252	18	1.2	10	0.7	8	20	10.5	27	12	30	9	2.7
	26	1.8	9.33	35.3	3.74	105.9	38	2.6	12.7	47.9	5.04	142.8	55	3.8	15.0	56.8	6.72	190.2	80	5.5	14.7	55.5	9.18	259.9	90	6.2	21.0	79.5	9.89	280	38	2.6	20	1.4	8	20	10	25	12	30	11	3.4
	34	2.3	6.67	25.2	4.58	129.7	60	4.1	6.7	25.2	7.27	205.7	80	5.5	8.67	32.8	9.18	259.9	100	6.9	10.0	37.9	11.1	315.1	—	—	—	—	—	—	55	3.8	30	2.1	7.5	19	10	25	11	28	14	4.3
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	80	5.5	40	2.8	7.5	19	10	25	11	28	15	4.6

For Technical Assistance, Call An EXAIR Application Engineer 1-800-903-9247
Toll Free FAX (866) 329-3924 • E-mail: techelp@exair.com • www.exair.com

An INTELLIGENT COMPRESSED AIR® Product

Internal Mix Flat Fan Pattern - 1/8 NPT

Model: AF8010SS
Material: Type 303 Stainless Steel

Model: AF8020SS
Material: Type 303 Stainless Steel

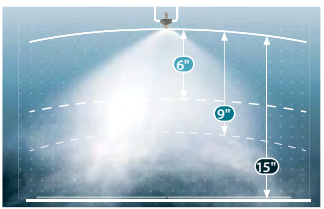
Model: AF8030SS
Material: Type 303 Stainless Steel

Model: AF8040SS
Material: Type 303 Stainless Steel

Model AF8010SS, AF8020SS, AF8030SS and AF8040SS

1/8 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.



1/8 NPT Internal Mix Flat Fan atomizing nozzles can apply a light or heavy film coat to products moving on a conveyor.

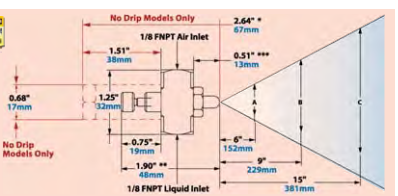
Dimensions and Airflow Pattern

DOWNLOAD drawings at EXAIR.com

No Drip Dimensions In Red
See page 92 for No Drip Atomizing Nozzles

* Model AF9010SS & AF9020SS 2.48 / 63mm
** Model AF8010SS & AF8020SS 1.74 / 44mm
***Model AF8010SS & AF8020SS 0.36 / 9mm

For more information about droplet size and spray angle, see page 97.



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		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	A cm	B in	B cm	C in	C cm	
AF8010SS	10	0.7	1.60	6.1	0.71 20.0	18	1.2	2.13	8.1	1.11 31.5	28	1.9	2.63	10.0	1.53 43.4	38	2.6	2.87	10.9	1.95 55.1	55	3.8	3.47	13.1	2.57 72.7	10	0.7	10	0.7	14	36	18	46	25	64	1	0.3
	14	1.0	1.43	5.4	0.76 21.6	26	1.8	1.87	7.1	1.44 40.7	36	2.5	2.20	8.3	1.94 54.8	46	3.2	2.57	9.7	2.28 64.7	75	5.2	2.93	11.1	3.42 96.9	26	1.8	20	1.4	15	38	22	56	30	76	2	0.6
	22	1.5	0.93	3.5	1.03 29.1	40	2.8	1.40	5.3	1.94 55.0	55	3.8	1.63	6.2	2.67 75.4	70	4.8	2.07	7.8	3.17 89.8	100	6.9	2.37	9.0	4.33 123	36	2.5	30	2.1	14	36	22	56	30	76	2	0.6
	—	—	—	—	— —	—	—	—	—	— —	—	—	—	—	— —	—	—	—	—	— —	—	—	—	—	— —	100	6.9	60	4.1	22	56	30	76	46	117	3	0.9
AF8020SS	18	1.2	1.53	5.8	1.04 29.5	30	2.1	2.30	8.7	2.30 65.1	42	2.9	2.87	10.9	2.05 57.9	55	3.8	3.53	13.4	2.56 72.5	75	5.2	4.27	16.2	3.25 91.9	18	1.2	10	0.7	14	36	17	43	24	61	2	0.6
	22	1.5	1.40	5.3	1.17 33.2	36	2.5	1.90	7.2	1.90 53.8	46	3.2	2.60	9.8	2.20 62.2	65	4.5	2.67	10.1	2.98 84.4	85	5.9	3.67	13.9	3.69 105	36	2.5	20	1.4	18	46	24	61	32	81	3	0.9
	26	1.8	1.00	3.8	1.29 36.5	40	2.8	1.63	6.2	1.63 46.2	50	3.4	2.20	8.3	2.38 67.5	—	—	—	—	— —	—	—	—	—	— —	46	3.2	30	2.1	23	58	29	74	37	94	3	0.9
	—	—	—	—	— —	44	3.0	0.85	3.2	0.85 24.1	—	—	—	—	— —	—	—	—	—	— —	—	—	—	—	— —	55	3.8	40	2.8	30	76	34	86	47	119	4	1.2
AF8030SS	16	1.1	7.83	29.6	1.42 40.3	28	1.9	10.8	41.0	2.00 56.7	38	2.6	13.0	49.2	2.54 71.8	46	3.2	14.7	55.5	2.94 83.1	65	4.5	17.0	64.4	4.00 113	16	1.1	10	0.7	21	53	26	66	32	81	3	0.9
	18	1.2	7.83	29.6	1.56 44.1	30	2.1	10.7	40.4	2.14 60.4	40	2.8	13.0	49.2	2.67 75.6	50	3.4	14.2	53.6	3.20 90.7	70	4.8	16.7	63.1	4.14 117	30	2.1	20	1.4	24	61	30	76	39	99	4	1.2
	20	1.4	7.50	28.4	1.69 47.9	32	2.2	10.3	39.1	2.24 63.5	42	2.9	12.5	47.3	2.80 79.3	52	3.6	14.2	53.6	3.28 92.9	75	5.2	16.5	62.5	4.54 128	42	2.9	30	2.1	29	74	36	91	44	112	4	1.2
	24	1.7	7.43	28.1	1.82 51.6	36	2.5	10.3	39.1	2.49 70.5	46	3.2	12.5	47.3	2.94 83.1	56	3.9	13.7	51.7	3.47 98.2	85	5.9	16.2	61.2	4.76 135	56	3.9	40	2.8	32	81	39	99	47	119	4	1.2
AF8040SS	12	0.8	11.2	42.3	1.08 30.5	22	1.5	14.8	56.2	1.56 44.1	34	2.3	17.8	67.5	2.15 60.9	46	3.2	20.3	77.0	2.71 76.7	65	4.5	28.0	106	3.61 102	12	0.8	10	0.7	20	51	24	61	31	79	3	0.9
	14	1.0	10.3	39.1	1.19 33.6	26	1.8	14.3	54.3	1.72 48.7	38	2.6	17.3	65.6	2.28 64.5	50	3.4	19.7	74.4	2.92 82.8	75	5.2	26.3	99.7	4.14 117	26	1.8	20	1.4	25	64	29	74	36	91	4	1.2
	20	1.4	8.33	31.5	1.51 42.7	34	2.3	12.3	46.7	2.15 60.9	48	3.3	15.3	58.0	2.75 77.9	60	4.1	18.3	69.4	3.36 95.0	90	6.2	23.3	88.3	4.80 136	60	4.1	40	2.8	26	66	31	79	42	107	6	1.8
	—	—	—	—	— —	38	2.6	11.7	44.2	2.43 68.7	50	3.4	14.8	56.2	2.88 81.6	70	4.8	17.0	64.4	3.91 111	100	6.9	22.7	85.8	5.33 151	100	6.9	60	4.1	32	81	39	99	44	112	7	2.1

Air Atomizing Spray Nozzles

External Mix Narrow Angle Flat Fan Pattern - 1/8 NPT

Model: EF8010SS
Material: Type 303 Stainless Steel

Model: EF8020SS
Material: Type 303 Stainless Steel

Model: EF8030SS
Material: Type 303 Stainless Steel

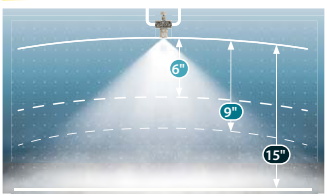
Model: EF8040SS
Material: Type 303 Stainless Steel

Model: EF8050SS
Material: Type 303 Stainless Steel

Model EF8010SS, EF8020SS, EF8030SS, EF8040SS and EF8050SS

1/8 NPT external mix narrow angle flat fan pattern nozzles are great where liquid is needed over a more concentrated area than the internal mix flat fan nozzles. Since they are external mix, airflow and liquid flow can be controlled independently. External mix flat fan pattern nozzles are the best choice where thicker liquids for a heavier coating are needed over a narrow band, such as a paint line.

For pressure fed applications with independent air and liquid control.

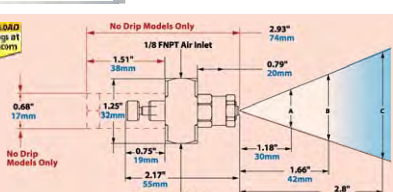


1/8 NPT External Mix Flat Fan atomizing nozzles are very versatile. They can apply a light or heavy film coating to products on a variety of different products.

Model EF8010SS applies lubricant to a drawer slide.

Dimensions and Airflow Pattern

DOWNLOAD drawings at EXAIR.com



No Drip Dimensions In Red
See page 92 for No Drip Atomizing Nozzles

No Drip Models Only

For more information about droplet size and spray angle, see page 97.

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				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	Pressure		Width						Max. Depth feet/m
																	Air PSI/BAR	Liquid PSI/BAR	A		B		C		
																			in	cm	in	cm	in	cm	
EF8010SS	10	0.7	1.22	4.6	10	0.7	1.64	6.2	10	0.7	1.82	6.9	10	0.7	2.00	7.6	10	0.7	10	0.7	4	10	4	10	4	1.2
	30	2.1			30	2.1			30	2.1			30	2.1			30	2.1	20	1.4	4	10	5	13	6	1.8
	50	3.4			50	3.4			50	3.4			50	3.4			30	2.1	30	2.1	4	10	5	13	6	1.8
	—	—			—	—			—	—			—	—			50	3.4	40	2.8	4	10	5	13	8	2.4
EF8020SS	10	0.7	2.00	7.6	10	0.7	2.56	9.7	10	0.7	2.67	10.1	10	0.7	2.93	11.1	10	0.7	10	0.7	3	8	4.5	11	4	1.2
	30	2.1			30	2.1			30	2.1			30	2.1			30	2.1	20	1.4	3	8	4.5	11	6	1.8
	50	3.4			50	3.4			50	3.4			50	3.4			30	2.1	30	2.1	3	8	4.5	11	7	2.1
	—	—			—	—			—	—			—	—			50	3.4	40	2.8	3	8	4.5	11	8	2.4
EF8030SS	10	0.7	4.47	16.9	10	0.7	5.60	21.2	10	0.7	6.30	23.8	10	0.7	7.67	29.0	10	0.7	10	0.7	4	10	5	13	5	1.5
	30	2.1			30	2.1			30	2.1			30	2.1			30	2.1	20	1.4	4	10	5	13	7	2.1
	50	3.4			50	3.4			50	3.4			50	3.4			30	2.1	30	2.1	4	10	5	13	8	2.4
	—	—			—	—			—	—			—	—			50	3.4	40	2.8	4	10	5	13	9	2.7
EF8040SS	20	1.4	8.67	32.8	20	1.4	10.75	40.7	20	1.4	13.00	49.2	20	1.4	14.42	54.6	20	1.4	10	0.7	5.5	14	7	18	7	2.1
	30	2.1			30	2.1			30	2.1			30	2.1			30	2.1	20	1.4	5.5	14	7	18	9	2.7
	40	2.8			40	2.8			40	2.8			40	2.8			40	2.8	30	2.1	5.5	14	7	18	10	2.7
	50	3.4			50	3.4			50	3.4			50	3.4			40	2.8	30	2.1	5.5	14	7	18	10	3.0
	—	—			—	—			—	—			—	—			50	3.4	40	2.8	5.5	14	7	18	11	3.4
EF8050SS	30	2.1	12.6	47.7	30	2.1	16.6	62.8	30	2.1	20.17	76.4	30	2.1	25.00	94.6	30	2.1	10	0.7	7	18	9	23	9	2.7
	40	2.8			40	2.8			40	2.8			40	2.8			40	2.8	20	1.4	7	18	9	23	10	3.0
	60	4.1			60	4.1			60	4.1			60	4.1			40	2.8	30	2.1	7	18	9	23	12	3.7
	70	4.8			70	4.8			70	4.8			70	4.8			70	4.8	40	2.8	7	18	9	23	12	3.7

For Technical Assistance, Call An EXAIR Application Engineer 1-800-903-9247
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An INTELLIGENT COMPRESSED AIR® Product

Siphon Fed Round Pattern - 1/8 NPT

Model: SR8010SS
Material: Type 303 Stainless Steel

Model: SR8020SS
Material: Type 303 Stainless Steel

Model: SR8030SS
Material: Type 303 Stainless Steel

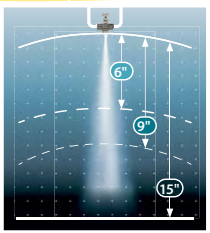
Model: SR8040SS
Material: Type 303 Stainless Steel

Model: SR8050SS
Material: Type 303 Stainless Steel

Model SR8010SS, SR8020SS, SR8030SS, SR8040SS and SR8050SS

1/8 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.

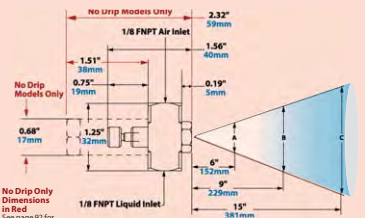
Siphon or gravity fed for non-pressurized applications.



The amount of liquid applied by the Siphon Fed atomizing nozzles varies depending on valve or inlet pressures.

Dimensions and Airflow Pattern

DOWNLOAD drawings at EXAIR.com



For more information about droplet size and spray angle, see page 97.

Model	Air Pressure PSI/BAR	Air SCFM/ SLPM	Gravity Head 18"	46cm	12"	30cm	6"	15cm	Siphon Height 4"	10cm	8"	20cm	12"	30cm	24"	61cm	36"	91cm
SR8010SS	10	0.7	0.48	13.6	0.35	1.3	0.33	1.2	0.27	1.0	0.21	0.8	0.21	0.8	0.17	0.7	---	---	---	---
	20	1.4	0.68	19.2	0.41	1.6	0.40	1.5	0.43	1.6	0.27	1.0	0.26	1.0	0.24	0.9	0.23	0.9	---	---
	40	2.8	1.35	38.3	0.49	1.9	0.48	1.8	0.46	1.7	0.35	1.3	0.32	1.2	0.30	1.1	0.26	1.0	0.23	0.9
	60	4.1	2.12	59.9	0.53	2.0	0.52	2.0	0.50	1.9	0.40	1.5	0.42	1.6	0.33	1.3	0.28	1.1	0.25	0.9
SR8020SS	10	0.7	0.59	16.7	0.61	2.3	0.53	2.0	0.48	1.8	0.35	1.3	0.33	1.2	0.24	0.9	---	---	---	---
	20	1.4	1.16	32.8	0.73	2.8	0.7	2.6	0.66	2.5	0.58	2.2	0.55	2.1	0.4	1.5	0.35	1.3	---	---
	40	2.8	1.9	53.8	0.88	3.3	0.8	3.0	0.76	2.9	0.66	2.5	0.58	2.2	0.53	2.0	0.45	1.7	0.38	1.4
	60	4.1	2.62	74.2	0.96	3.6	0.92	3.5	0.82	3.1	0.75	2.8	0.68	2.6	0.6	2.3	0.52	2.0	0.46	1.7
SR8030SS	10	0.7	0.55	15.6	1.31	5.0	1.22	4.6	0.96	3.6	0.76	2.9	0.61	2.3	0.53	2.0	---	---	---	---
	20	1.4	1.06	30.0	1.66	6.3	1.59	6.0	1.23	4.7	1.07	4.1	1.13	4.3	0.92	3.5	0.76	2.9	---	---
	40	2.8	1.86	52.7	1.89	7.2	1.8	6.8	1.53	5.8	1.34	5.1	1.49	5.6	1.19	4.5	1.05	4.0	0.82	3.1
	60	4.1	2.45	69.4	1.98	7.5	1.86	7.0	1.58	6.0	1.46	5.5	1.74	6.6	1.34	5.1	1.29	4.9	1.04	3.9
SR8040SS	10	0.7	1.40	39.5	2.65	10.0	2.43	9.2	2.12	8.0	1.22	4.6	1.00	3.8	---	---	---	---	---	---
	20	1.4	2.03	57.5	3.01	11.4	2.86	10.8	2.53	9.6	1.78	6.7	1.57	6.0	1.37	5.2	---	---	---	---
	40	2.8	3.17	89.8	3.58	13.6	3.55	13.4	3.29	12.0	2.54	9.6	2.48	9.4	2.18	8.2	1.98	7.5	1.22	4.6
	60	4.1	4.42	125	4.09	15.5	3.99	15.1	3.75	14.0	3.03	11.5	2.98	11.3	2.85	11.0	2.59	9.8	2.11	8.0
SR8050SS	10	0.7	1.84	52.1	1.84	7.0	4.16	15.7	3.83	14.0	3.28	12.4	3.1	11.7	2.45	9.3	0.74	2.8	---	---
	20	1.4	2.93	82.9	2.93	11.1	5.53	20.9	3.7	14.0	4.12	15.6	3.51	13.3	3.98	15.0	3.35	12.7	1.8	6.8
	40	2.8	4.02	114	4.02	15.2	5.83	22.1	4.39	17.0	4.6	17.4	4.31	16.3	5.08	19.0	4.16	15.7	2.93	11.1
	60	4.1	5.12	145	5.12	19.4	5.92	22.4	5.56	21.0	5.5	20.8	5.09	19.3	5.33	20.0	5.18	19.6	3.84	14.5

Spray Dimensions at 8" (20cm) Siphon Height

Air Pressure PSI/BAR	Width A in	A cm	B in	B cm	C in	C cm	Max. Depth feet/m
10	0.7	1.5	4	2	5	3	8	1.5	0.5
20	1.4	1.5	4	2	5	3	8	1.5	0.5
40	2.8	1.5	4	2	5	3	8	2	0.6
60	4.1	1.5	4	2	5	3	8	3	0.9
10	0.7	1.5	4	2	5	3	8	1.5	0.5
20	1.4	1.5	4	2	5	3	8	2	0.6
40	2.78	1.5	4	2	5	3	8	3	0.9
60	4.1	1.5	4	2	5	3	8	4	1.2
10	0.7	1.5	4	2	5	3	8	1.5	0.5
20	1.4	1.5	4	2	5	3	8	3	0.9
40	2.78	1.5	4	2	5	3	8	4	1.2
60	4.1	1.5	4	2	5	3	8	5	1.5
10	0.7	1.5	4	2	5	3	8	3	0.9
20	1.4	1.5	4	2	5	3	8	4	1.2
40	2.78	1.5	4	2	5	3	8	4	1.2
60	4.1	1.5	4	2	5	3	8	5	1.5
10	0.7	1.5	4	2	5	3	8	5	1.5
20	1.4	1.5	4	2	5	3	8	5	1.5
40	2.8	1.5	4	2	5	3	8	7	2.1
60	4.1	1.5	4	2	5	3	8	9	2.7
80	5.5	1.5	4	2	5	3	8	10	3.0

Air Atomizing Spray Nozzles

Siphon Fed Flat Fan Pattern - 1/8 NPT

Model: SF8010SS
Material: Type 303 Stainless Steel

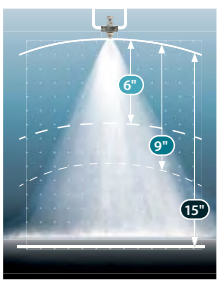
Model: SF8020SS
Material: Type 303 Stainless Steel

Model: SF8030SS
Material: Type 303 Stainless Steel

Model SF8010SS, SF8020SS and SF8030SS

1/8 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.

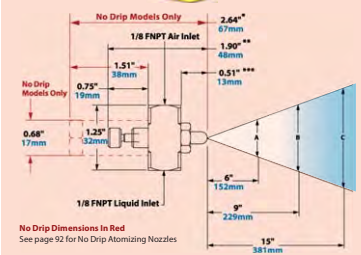
Siphon or gravity fed for non-pressurized applications.



1/8 NPT Siphon Fed Flat Fan atomizing nozzles apply a light coating of liquid over a wide band.

Dimensions and Airflow Pattern

DOWNLOAD drawings at EXAIR.com



No Drip Dimensions In Red
See page 92 for No Drip Atomizing Nozzles

* Model SF8010SS 2.48 / 63mm
** Model SF8010SS 1.74 / 44mm
***Model SF8010SS 0.36 / 9mm

For more information about droplet size and spray angle, see page 97.

Model	Air Pressure PSI/BAR		SCFM/ SLPM		Liquid Flow in GPH/LPH: Gravity Head 18"	46cm	12"	30cm	6"	15cm	Siphon Height 4"	10cm	8"	20cm	12"	30cm	24"	61cm	36"	91cm	Spray Dimensions at 8" (20cm) Siphon Height: Air Pressure PSI/BAR		Width A in	A cm	B in	B cm	C in	C cm	Max. Depth feet/m	
SF8010SS	10	0.7	1.07	30.3	0.32	1.2	0.30	1.1	0.25	1.0	0.24	0.9	0.23	0.9	0.18	0.7	0.17	0.7	0.14	0.5	10	0.7	7	18	9	23	12	30	2	0.6
	20	1.4	1.31	37.1	0.36	1.4	0.35	1.3	0.31	1.2	0.31	1.2	0.30	1.1	0.25	0.9	0.23	0.9	0.19	0.7	20	1.4	7	18	9	23	12	30	2	0.6
	60	4.1	1.69	47.9	0.43	1.6	0.40	1.5	0.35	1.3	0.34	1.3	0.32	1.2	0.27	1.0	0.26	1.0	0.24	0.9	30	2.1	7	18	9	23	12	30	2	0.6
SF8020SS	20	1.4	1.81	51.3	1.52	5.8	1.33	5.0	1.10	4.2	0.80	0.9	0.76	2.9	0.71	2.7	0.50	1.9	0.36	1.4	20	1.4	8	20	9	23	12	30	2	0.6
	30	2.1	2.30	65.1	1.18	4.5	1.16	4.4	1.06	4.0	0.85	3.2	0.79	3.0	0.77	2.9	0.52	2.0	0.44	1.7	30	2.1	9	23	11	28	13	33	2	0.6
	40	2.8	2.83	80.2	1.01	3.8	0.90	3.4	0.83	3.1	0.70	2.6	0.67	2.5	0.63	2.4	0.42	1.6	0.27	1.0	40	2.8	9	23	10	25	13	33	2	0.6
	50	3.4	3.34	94.6	0.85	3.2	0.71	2.7	0.59	2.2	0.48	1.8	0.41	1.6	0.51	1.9	0.32	1.2	---	---	50	3.4	7	18	8	20	9	23	3	0.9
SF8030SS	20	1.4	1.78	50.3	1.45	5.5	1.40	5.3	1.38	5.2	0.94	3.6	0.90	3.4	0.77	2.9	0.72	2.7	0.61	2.3	20	1.4	7	18	8	20	9.5	24	2	0.6
	30	2.1	2.24	63.5	1.16	4.4	1.12	4.2	1.10	4.2	1.00	3.8	0.98	3.7	0.86	3.2	0.81	3.1	0.69	2.6	30	2.1	7	18	8	20	9.5	24	2	0.6
	40	2.8	2.75	77.8	0.98	3.7	0.96	3.6	0.85	3.2	0.90	3.4	0.87	3.3	0.79	3.0	0.66	2.5	0.52	2.0	40	2.8	7	18	8	20	9.5	24	3	0.9
	50	3.4	3.00	85.0	0.83	3.2	0.79	3.0	0.70	2.6	0.75	2.8	0.69	2.6	0.66	2.5	0.51	1.9	0.44	1.7	50	3.4	7	18	8	20	9.5	24	3	0.9

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An INTELLIGENT COMPRESSED AIR® Product

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

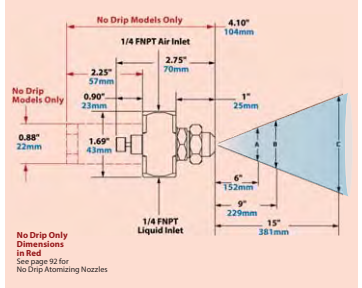
Model: AN1030SS
Material: Type 303 Stainless Steel

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

DOWNLOAD drawings at EXAIR.com



No Drip Only Dimensions in Red
See page 92 for No Drip Atomizing Nozzles

For more information about droplet size and spray angle, see page 97.

Spray Nozzles

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					
	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	
AN1010SS	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	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
	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
	—	—	—	—	—	—	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
AN1020SS	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
	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
	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
	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
AN1030SS	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	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
	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
	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
AN1040SS	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
	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
	—	—	—	—	—	—	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
	—	—	—	—	—	—	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

Spray Dimensions

Pressure			Width						Max. Depth
			A		B		C		
Air PSI/BAR	Liquid PSI/BAR		in	cm	in	cm	in	cm	feet/m
12	0.8	10	0.7	2.3	6	3.3	8	5.0	13	6	1.8
20	1.4	20	1.4	2.8	7	3.8	10	6.0	15	8	2.4
34	2.3	30	2.1	3.0	8	4.3	11	6.5	17	9	2.7
42	2.9	40	2.8	3.5	9	4.5	11	6.5	17	10	3.0
58	4.0	60	4.1	4.0	10	5.0	13	7.0	18	11	3.4
24	1.7	10	0.7	2.5	6	3.5	9	5.5	14	11	3.4
38	2.6	20	1.4	2.8	7	4.0	10	6.5	17	12	3.7
55	3.8	30	2.1	3.0	8	4.5	11	6.5	17	13	4.0
65	4.5	40	2.8	3.5	9	5.0	13	7.0	18	14	4.3
85	5.9	60	4.1	4.0	10	5.5	14	7.5	19	18	5.5
14	1.0	10	0.7	2.8	7	4.5	11	6.5	17	10	3.0
26	1.8	20	1.4	3.3	8	5.0	13	7.0	18	16	4.9
40	2.8	30	2.1	3.8	10	5.5	14	7.0	18	19	5.8
50	3.4	40	2.8	4.0	10	6.0	15	8.0	20	22	6.7
70	4.8	60	4.1	4.0	10	6.0	15	8.0	20	26	7.9
14	1.0	10	0.7	3.0	8	4.5	11	6.5	17	17	5.2
24	1.7	20	1.4	3.5	9	6.0	15	7.5	19	21	6.4
34	2.3	30	2.1	4.0	10	6.5	17	8.0	20	26	7.9
44	3.0	40	2.8	4.5	11	7.0	18	8.5	22	30	9.1
64	4.4	60	4.1	5.0	13	7.0	18	9.0	23	35	10.7

Air Atomizing Spray Nozzles

Internal Mix Wide Angle Round Pattern - 1/4 NPT

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.

Model: AW1010SS
Material: Type 303 Stainless Steel

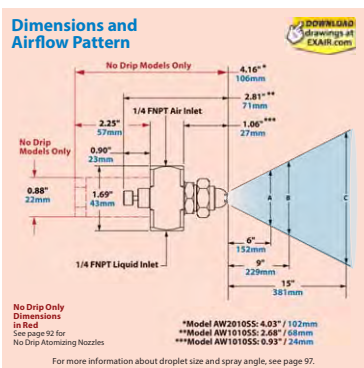
Model: AW1020SS
Material: Type 303 Stainless Steel

Model: AW1030SS
Material: Type 303 Stainless Steel

Model: AW1040SS
Material: Type 303 Stainless Steel

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 97.

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		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	A cm	B in	B cm	C in	C cm	
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	30	2.1	30	2.1	12	30	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	40	2.8	40	2.8	16	41	16	41	22	56	10	3.0
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	50	3.4	50	3.4	20	51	20	51	28	71	12	3.7
	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	60	4.1	60	4.1	24	61	24	61	34	86	15	4.6
	---	---	---	---	---	---	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	70	4.8	70	4.8	28	71	28	71	40	102	17	5.2
	---	---	---	---	---	---	---	---	---	---	---	---	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	80	5.5	80	5.5	32	81	32	81	46	117	20	6.1
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	24	1.7	24	1.7	11	28	13	33	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	18	46	13	4.0
	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	65	4.5	60	4.1	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	4.9
	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	36	2.2	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
																															90	6.2	60	4.1	12	30	16	41	23	58	25	7.6

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An INTELLIGENT COMPRESSED AIR® Product

Internal Mix Flat Fan Pattern - 1/4 NPT

KING awards 2011 WINNER

Product of the Year Finalist 2011


Model: AF1010SS
Material: Type 303 Stainless Steel


Model: AF1020SS
Material: Type 303 Stainless Steel


Model: AF1030SS
Material: Type 303 Stainless Steel

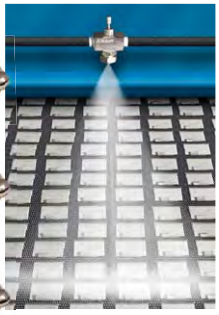

Model: AF1040SS
Material: Type 303 Stainless Steel


Model: AF1050SS
Material: Type 303 Stainless Steel

Model AF1010SS, AF1020SS, AF1030SS, AF1040SS, and AF1050SS

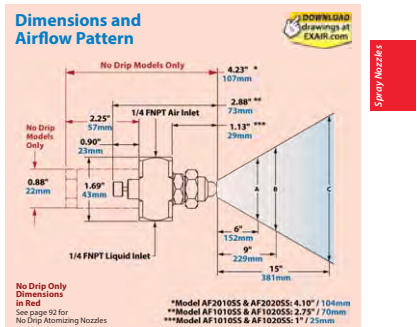
1/4 NPT internal mix flat fan pattern atomizing nozzles are designed with efficiency in mind. Especially good for vertical or horizontal assembly lines, their broad thin pattern makes efficient use of your expensive liquids. Their output can be adjusted for a very light film or a heavy coat of whatever 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 92 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 97.

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			
	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
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
	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
	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
	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
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	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
	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
	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
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	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
	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
	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
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	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
	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
	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
AF10305S	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
	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
	---	---	---	---	---	---	---	---	---	---	---	---	40	2.8	9.0	34.1	6.1	173	50	3.4	13.5	51.1	7.3	207	70	4.8	21.0	79.5	8.7	246
	---	---	---	---	---	---	---	---	---	---	---	---	42	2.9	6.3	23.8	7.0	198	54	3.7	7.5	28.4	8.4	238	80	5.5	8.5	32.2	11.2	317

Spray Dimensions

Air PSI/ BAR	Pressure Liquid PSI/BAR	Width A in	A cm	B in	B cm	C in	C cm	Max. Depth feet/m
16	1.1	10	0.7	9	23	12	30	15	38	5	1.5
30	2.1	20	1.4	11	28	13	33	17	43	6	1.8
40	2.8	30	2.1	12	30	14	36	20	51	6	1.8
50	3.4	40	2.8	14	36	16	41	22	56	7	2.1
85	5.9	60	4.1	14	36	17	43	23	58	7	2.1
16	1.1	10	0.7	11	28	14	36	19	48	5	1.5
30	2.1	20	1.4	14	36	17	43	21	53	6	1.8
42	2.9	30	2.1	14	36	18	46	23	58	6	1.8
50	3.4	40	2.8	16	41	19	48	26	66	7	2.1
80	5.5	60	4.1	16	41	21	53	29	74	8	2.4
20	1.4	10	0.7	11	28	14	36	19	48	10	3.0
32	2.2	20	1.4	15	38	17	43	23	58	11	3.4
42	2.9	30	2.1	16	41	21	53	29	74	12	3.7
54	3.7	40	2.8	19	48	25	64	33	84	14	4.3
75	5.2	60	4.1	20	51	26	66	35	89	15	4.6
16	1.1	10	0.7	14	36	18	46	24	61	10	3.0
32	2.2	20	1.4	15	38	19	48	27	69	12	3.7
46	3.2	30	2.1	17	43	23	58	30	76	13	4.0
56	3.9	40	2.8	20	51	25	64	34	86	15	4.6
85	5.9	60	4.1	21	53	27	69	36	91	15	4.6
14	1.0	10	0.7	14	36	18	46	23	58	10	3.0
26	1.8	20	1.4	15	38	19	48	24	61	13	4.0
38	2.6	30	2.1	16	41	20	51	25	64	16	4.9
48	3.3	40	2.8	17	43	20	51	27	69	18	5.5
70	4.8	60	4.1	17	43	21	53	29	74	19	5.8

Air Atomizing Spray Nozzles

Internal Mix Deflected Flat Fan Pattern - 1/4 NPT

Model: AD1010SS
Material: Type 303 Stainless Steel

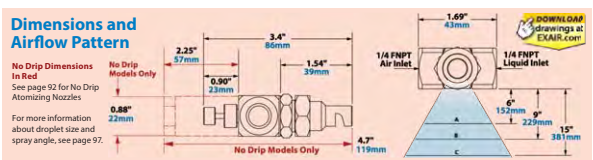
A Model AD1010SS is used to apply a protective coating to wood panels.

Model AD1010SS

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.

Dimensions and Airflow Pattern



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		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 in	A cm	B in	B cm	C in	C cm	
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	107
	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	2.7	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
																													70	4.8	60	4.1	12	30	15	38	18	46	42	107

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

Model: AT1010SS
Material: Type 303 Stainless Steel

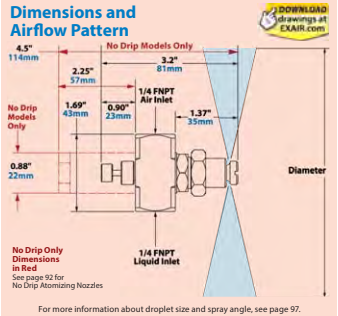
This 360° circular pattern nozzle can be used to coat inside diameters or cover a broad area of over 4' (1219mm).

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.

Dimensions and Airflow Pattern



For more information about droplet size and spray angle, see page 97.

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		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
																													85	5.9	60	4.1	53	135

For Technical Assistance, Call An EXAIR Application Engineer 1-800-903-9247
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An INTELLIGENT COMPRESSED AIR® Product

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

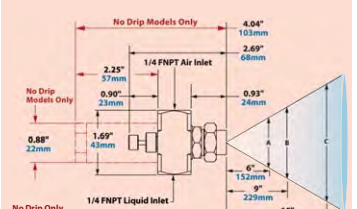
1/4 NPT external mix round pattern nozzles are great where a high volume of liquid is needed over a specific area or general area, but not in a flat pattern. Applications include spot treatments of parts, covering irregularly shaped objects or covering a container of parts with a heavy coat. They are 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

DOWNLOAD drawings at EXAIR.com



See page 92 for No Drip Atomizing Nozzles

For more information about droplet size and spray angle, see page 97.

Model	3 PSI/0.2 BAR Liquid: Air Pressure PSI/BAR	GPH/ LPH	SCFM/ SLPM	5 PSI/0.3 BAR Liquid: Air Pressure PSI/ BAR	GPH/ LPH	SCFM/ SLPM	10 PSI/0.7 BAR Liquid: Air Pressure PSI/ BAR	GPH/ LPH	SCFM/ SLPM	20 PSI/1.4 BAR Liquid: Air Pressure PSI/ BAR	GPH/ LPH	SCFM/ SLPM	40 PSI/2.8 BAR Liquid: Air Pressure PSI/ BAR	GPH/ LPH	SCFM/ SLPM
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		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		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		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
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		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		4.1 116
	20 1.4		2.4 68.0	40 2.8		3.1 87.8	40 2.8		3.1 87.8	60 4.1		4.1 116	80 5.5		5.3 150
	30 2.1		3.6 102	60 4.1		4.1 116	60 4.1		4.1 116	90 6.2		5.9 167	90 6.2		5.9 167
ER1030SS	10 0.7	4.4 16.7	4.0 113	10 0.7	5.5 20.8	4.0 113	15 1.0	7.6 28.8	4.9 139	30 2.1	11.0 41.6	7.7 218	40 2.8	14.0 53.0	9.5 269
	20 1.4		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		9.5 269	40 2.8		9.5 269	50 3.4		11.2 317	60 4.1		11.7 331	60 4.1		11.7 331
	50 3.4		11.2 317	60 4.1		11.7 331	70 4.8		13.4 379	80 5.5		15.3 433	80 5.5		15.3 433
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
	30 2.1		7.7 218	30 2.1		7.7 218	40 2.8		9.5 269	50 3.4		11.2 317	60 4.1		11.7 331
	40 2.8		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
	50 3.4		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
ER1050SS	40 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	– –	– –	– –
	50 3.4		16.8 470	65 4.5		21.0 595	70 4.8		22.3 631	90 6.2		27.9 790	– –	– –	– –
	60 4.1		19.7 558	70 4.8		22.3 631	80 5.5		25.3 716	– –		– –	– –	– –	– –
	65 4.5		21.0 595	80 5.5		25.3 716	90 6.2		27.9 790	– –		– –	– –	– –	– –

Spray Dimensions

Pressure: Air PSI/ BAR	Pressure: Liquid PSI/ BAR	Width: A in	A cm	B in	B cm	C in	C cm	Max. Depth feet/m
10 0.7	3 0.2	3.0	7.6	4.3	10.9	6.3	16.0	9 2.7
20 1.4	5 0.3	3.3	8.4	4.5	11.4	6.8	17.3	11 3.4
40 2.8	10 0.7	3.5	8.9	5.3	13.5	7.5	19.1	13 4.0
60 4.1	20 1.4	3.5	8.9	5.0	12.7	7.0	17.8	14 4.3
80 5.5	40 2.8	4.0	10.2	5.5	14.0	8.0	20.3	15 4.6
10 0.7	3 0.2	3.8	9.7	5.0	12.7	7.5	19.1	10 3.0
20 1.4	5 0.3	4.0	10.2	5.8	14.7	7.0	17.8	12 3.7
40 2.8	10 0.7	4.3	10.9	6.0	15.2	8.3	21.1	15 4.6
60 4.1	20 1.4	4.5	11.4	6.0	15.2	8.3	21.1	15 4.6
80 5.5	40 2.8	5.0	12.7	6.5	16.5	8.5	21.6	16 4.9
10 0.7	3 0.2	4.3	10.9	6.0	15.2	8.8	22.4	13 4.0
40 2.8	5 0.3	4.5	11.4	6.5	16.5	8.5	21.6	23 7.0
40 2.8	10 0.7	4.8	12.2	6.8	17.3	9.0	22.9	24 7.3
60 4.1	20 1.4	4.5	11.4	6.8	17.3	9.0	22.9	29 8.8
60 4.1	40 2.8	5.3	13.5	7.0	17.8	9.3	23.6	30 9.1
20 1.4	3 0.2	5.8	14.7	7.5	19.1	10.0	25.4	15 4.6
40 2.8	5 0.3	6.0	15.2	8.0	20.3	10.3	26.2	19 5.8
60 4.1	10 0.7	6.0	15.2	8.0	20.3	10.5	26.7	23 7.0
60 4.1	20 1.4	5.5	14.0	7.0	17.8	9.0	22.9	24 7.3
80 5.5	40 2.8	4.5	11.4	6.5	16.5	9.5	24.1	30 9.1
40 2.8	3 0.2	6.5	16.5	8.8	22.4	11.0	27.9	23 7.0
70 4.8	5 0.3	6.5	16.5	9.0	22.9	10.0	25.4	28 8.5
80 5.5	10 0.7	6.5	16.5	9.0	22.9	11.0	27.9	30 9.1
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.

Air Atomizing Spray Nozzles

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

Model: EF1010SS
Material: Type 303 Stainless Steel

Model: EF1020SS
Material: Type 303 Stainless Steel

Model: EF1030SS
Material: Type 303 Stainless Steel

Model: EF1040SS
Material: Type 303 Stainless Steel

Model EF1010SS, EF1020SS, EF1030SS and EF1040SS

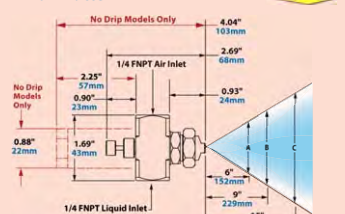
1/4 NPT external mix narrow angle flat fan pattern nozzles are great where a high volume of liquid is needed over a concentrated area. Since they are external mix, airflow and liquid flow can be controlled independently. External mix narrow angle flat fan pattern nozzles are the best choice where thicker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

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

Dimensions and Airflow Pattern

DOWNLOAD drawings at EXAIR.com



No Drip Only Dimensions in Red
See page 92 for No Drip Atomizing Nozzles

For more information about droplet size and spray angle, see page 97.

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										Max. Depth feet/m
	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							
																											Air PSI/ BAR		Liquid PSI/ BAR		A		B		C		
																															in	cm	in	cm	in	cm	
EF1010SS	5	0.3	1.0	3.8	0.8 22.7	10	0.7	1.4	5.3	1.0 28.3	15	1.0	1.9	7.2	1.3 36.8	25	1.7	2.7	10.2	1.8 51.0	45	3.1	3.8	14.4	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 28.3	20	1.4			1.5 42.5	25	1.7			1.8 51.0	40	2.8			2.5 70.8	60	4.1			3.4 96.3	25	1.7	20	1.4	6.5	16.5	9.5	24.1	13.0	33.0	13	4.0
	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			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			6.5	16.5	9.5	24.1	13.0	33.0	18	5.5
EF1020SS	10	0.7	2.5	9.5	1.0 28.3	15	1.0	3.2	12.1	1.3 36.8	20	1.4	4.3	16.3	1.5 42.5	35	2.4	5.9	22.3	2.2 62.3	50	3.4	7.5	28.4	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			1.5 42.5	25	1.7			1.8 51.0	30	2.1			2.0 56.6	50	3.4			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	35	2.4	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	60	4.1			7.5	19.1	11.5	29.2	18.0	45.7	20	6.1
EF1030SS	10	0.7	4.4	16.7	3.5 99.1	20	1.4	5.5	20.8	5.3 150	25	1.7	7.6	28.8	6.1 173	40	2.8	11.0	41.6	8.4 238	50	3.4	14.0	53.0	10.0 283	75	5.2	40	2.8	7.5	19.1	12.0	30.5	17.0	43.2	22	6.7
	20	1.4			5.3 150	30	2.1			6.9 195	35	2.4			7.6 215	50	3.4			10.0 283	60	4.1			11.5 326	10	0.7	3	0.2	6.0	15.2	9.0	22.9	12.0	30.5	12	3.7
	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	35	2.4	5	0.3	6.8	17.3	9.0	22.9	12.0	30.5	20	6.1
	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	40	2.8	10	0.7	7.0	17.8	10.0	25.4	13.0	33.0	23	7.0
EF1040SS	15	1.0	10.0	37.9	4.4 125	25	1.7	13.5	51.1	6.1 173	35	2.4	18.8	71.2	7.6 215	45	3.1	27.6	104	9.2 261	55	3.8	31.0	117	10.7 303	60	4.1	20	1.4	7.0	17.8	11.0	27.9	16.0	40.6	28	8.5
	25	1.7			6.1 173	35	2.4			7.6 215	45	3.1			9.2 261	55	3.8			10.7 303	65	4.5			12.2 345	75	5.2	40	2.8	7.0	17.8	11.0	27.9	16.0	40.6	30	9.1
	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	15	1.0	3	0.2	6.0	15.2	10.0	25.4	14.0	35.6	13	4.0
	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	30	2.1	3	0.2	6.8	17.3	11.0	27.9	14.0	35.6	17	5.2
																											50	3.4	10	0.7	7.5	19.1	12.0	30.5	15.0	38.1	22	6.7
																											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

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An INTELLIGENT COMPRESSED AIR® Product

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

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

Model EB1010SS, EB1020SS, EB1030SS and EB1040SS

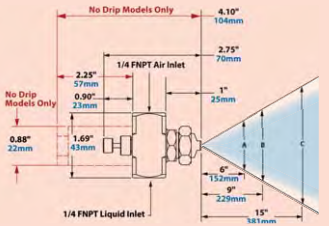
1/4 NPT external mix wide angle flat fan pattern nozzles are great where a high volume of liquid is needed over a wide area such as a conveyor line. Because they are external mix, airflow and liquid flow can be controlled independently. Common applications are those which require a moderate application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

For pressure fed applications with independent air and liquid control.

(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 92 for No Drip Atomizing Nozzles

For more information about droplet size and spray angle, see page 97.

Model	3 PSI/0.2 BAR Liquid: Air Pressure PSI/BAR	GPH/LPH	SCFM/SLPM	5 PSI/0.3 BAR Liquid: Air Pressure PSI/BAR	GPH/LPH	SCFM/SLPM	10 PSI/0.7 BAR Liquid: Air Pressure PSI/BAR	GPH/LPH	SCFM/SLPM	20 PSI/1.4 BAR Liquid: Air Pressure PSI/BAR	GPH/LPH	SCFM/SLPM	40 PSI/2.8 BAR Liquid: Air Pressure PSI/BAR	GPH/LPH	SCFM/SLPM	Spray Dimensions: Pressure Air PSI/BAR	Pressure Liquid PSI/BAR	Width A in	Width A cm	Width B in	Width B cm	Width C in	Width C cm	Max. Depth feet/m
EB1010SS	5 0.3	1.0 3.8	0.9 25.5	5 0.3	1.4 5.3	0.9 25.5	8 0.6	1.9 7.2	1.1 31.1	10 0.7	2.7 10.2	1.3 36.8	15 1.0	3.8 14.4	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		1.1 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		1.7 48.1	20 1.4		2.0 56.6	30 2.1		2.6 73.6	30 2.1		2.6 73.6	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
																30 2.1	40 2.8	11.0	27.9	15.0	38.1	21.0	53.3	14 4.3
EB1020SS	6 0.4	2.5 9.5	1.0 28.3	6 0.4	3.2 12.1	1.0 28.3	6 0.4	4.3 16.3	1.0 28.3	10 0.7	5.9 22.3	1.3 36.8	20 1.4	7.5 28.4	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		1.1 31.1	8 0.6		1.1 31.1	8 0.6		1.1 31.1	12 0.8		1.5 42.5	25 1.7		2.3 65.1	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	19.0	48.3	24.0	61.0	12 3.7
																30 2.1	40 2.8	13.0	33.0	19.0	48.3	24.0	61.0	14 4.3
EB1030SS	8 0.6	4.4 16.7	3.4 96.3	10 0.7	5.5 20.8	3.8 108	15 1.0	7.6 28.8	4.8 136	35 2.4	11.0 41.6	8.4 238	50 3.4	14.0 53.0	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		4.8 136	20 1.4		5.9 167	25 1.7		6.7 190	45 3.1		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	45 3.1	20 1.4	13.0	33.0	19.0	48.3	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	60 4.1	40 2.8	14.0	35.6	18.0	45.7	24.0	61.0	26 7.9
																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	10.0 37.9	3.8 108	15 1.0	13.5 51.1	4.8 136	25 1.7	18.8 71.2	6.7 190	45 3.1	27.6 104	10.1 286	75 5.2	31.0 117	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		4.8 136	20 1.4		5.9 167	30 2.1		7.6 215	50 3.4		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
																90 6.2	40 2.8	16.0	40.6	22.0	55.9	28.0	71.1	26 7.9

Air Atomizing Spray Nozzles

Siphon Fed Round Pattern - 1/4 NPT

KING awards 2011 WINNER

Product of the Year Finalist 2014

Model: SR1010SS
Material: Type 303 Stainless Steel

Model: SR1020SS
Material: Type 303 Stainless Steel

Model: SR1030SS
Material: Type 303 Stainless Steel

Model: SR1040SS
Material: Type 303 Stainless Steel

Model SR1010SS, SR1020SS, SR1030SS and SR1040SS

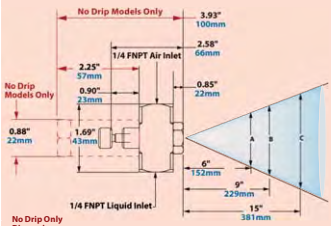
1/4 NPT siphon fed round pattern nozzles are great where no liquid pressure is available and a thin coating is needed at a specific area. Flow rate is adjustable via the adjusting valve. Siphon nozzles work best with a suction height of 36" (914mm) or less. Since these nozzles are siphon fed, the compressed 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

DOWNLOAD drawings at EXAIR.com



See page 92 for No Drip Atomizing Nozzles

For more information about droplet size and spray angle, see page 97.

Liquid Flow in GPH/LPH

Model	Air Pressure PSI/BAR	Air SCFM/ SLPM	Gravity Head 18"	46cm	12"	30cm	6"	15cm	Siphon Height 4"	10cm	8"	20cm	12"	30cm	24"	61cm	36"	91cm
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	---	---	---	---	---	---
	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	---	---	---	---
	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
	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
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	---	---	---	---
	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	---	---
	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
	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
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	---	---
	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
	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
	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
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	---	---
	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
	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
	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

Spray Dimensions at 8" (20cm) Siphon Height

Air Pressure PSI/BAR	Width A in	A cm	B in	B cm	C in	C cm	Max. Depth feet/m
10	0.7	2.5	6	4.0	10	5.8	15	7	2.1
20	1.4	3.3	8	4.3	11	6.0	15	9	2.7
40	2.8	3.8	10	5.0	13	6.8	17	10	3.0
60	4.1	3.8	10	5.0	13	6.8	17	11	3.4
10	0.7	3.3	8	4.8	12	6.8	17	9	2.7
20	1.4	3.5	9	5.0	13	7.0	18	11	3.4
40	2.8	3.8	10	5.5	14	7.5	19	14	4.3
60	4.1	4.0	10	5.8	15	8.0	20	16	4.9
20	1.4	3.5	9	5.0	13	7.0	18	12	3.7
40	2.8	3.8	10	5.3	13	7.5	19	13	4.0
60	4.1	3.8	10	5.5	14	8.0	20	15	4.6
80	5.5	4.0	10	5.8	15	8.3	21	18	5.5
30	2.1	4.8	12	6.5	17	8.8	22	19	5.8
40	2.8	5.2	13	7.0	18	9.3	24	21	6.4
60	4.1	5.5	14	7.5	19	9.8	25	24	7.3
80	5.5	5.8	15	7.8	20	10.0	25	27	8.2

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An INTELLIGENT COMPRESSED AIR® Product

KiNG awards 2011 WINNER

PRODUCT OF THE YEAR Finalist 2011

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

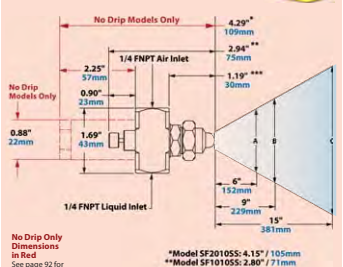
1/4 NPT siphon fed flat fan pattern nozzles are great where no liquid pressure is available and a thin coating is needed over a wide band. Flow rate is adjustable via the adjusting valve. Siphon nozzles work best with a suction height of 36" (914mm) or less. Since these nozzles are siphon fed, the compressed 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 92 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 97.

Model	Air Pressure PSI/BAR		Air SCFM/SLPM		Liquid Flow in GPH/LPH — Gravity Head 18"	46cm	12"	30cm	6"	15cm	Siphon Height 4"	10cm	8"	20cm	12"	30cm	24"	61cm	36"	91cm	Spray Dimensions at 8" (20cm) Siphon Height — Air Pressure PSI/BAR		Width A in	cm	B in	cm	C in	cm	Max. Depth feet/m	
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

Air Atomizing Spray Nozzles

Internal Mix Narrow Angle Round Pattern - 1/2 NPT

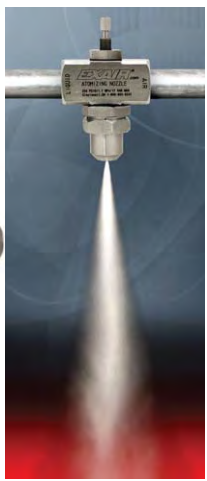
Model: AN5010SS
Material: Type 303 Stainless Steel

Model: AN5020SS
Material: Type 303 Stainless Steel

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.



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

For more information about droplet size and spray angle see page 97.

Dimensions and Airflow Pattern

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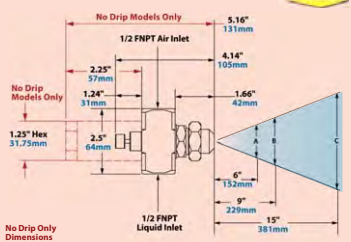

No Drip Only Dimensions in Red
See page 92 for No Drip Atomizing Nozzles

For more information about droplet size and spray angle, see page 97.

Spray Dimensions

Model	Pressure Air PSI/BAR	Pressure Liquid PSI/BAR	Width A in	Width A cm	Width B in	Width B cm	Width C in	Width C cm	Max. Depth feet/m	
AN5010SS	20	1.4	5	0.3	3.5	9	5.75	14.6	8.5	22	22	6.7
	36	2.5	15	1.0							30	9.1
	50	3.4	25	1.7							34	10.4
	60	4.1	35	2.4							37	11.3
AN5020SS	10	0.7	5	0.3	4	10	6	15.2	8.5	22	20	6.1
	32	2.2	25	1.7	5.5	14	7.5	19.1	10	25	27	8.2
	44	3.0	35	2.4	6	15	9	22.9	10.5	27	35	10.7
	64	4.4	55	3.8	6	15	9	22.9	10.5	27	42	12.8

Model	5 PSI/0.3 BAR Liquid: Air Pressure PSI/BAR		GPH/LPH		SCFM/SLPM		15 PSI/1.0 BAR Liquid: Air Pressure PSI/BAR		GPH/LPH		SCFM/SLPM		25 PSI/1.7 BAR Liquid: Air Pressure PSI/BAR		GPH/LPH		SCFM/ SLPM		35 PSI/2.4 BAR Liquid: Air Pressure PSI/BAR		GPH/LPH		SCFM/SLPM		55 PSI/3.8 BAR Liquid: 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

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An INTELLIGENT COMPRESSED AIR® Product

Internal Mix Wide Angle Round Pattern - 1/2 NPT

Model: AW5010SS
Material: Type 303 Stainless Steel

Model: AW5020SS
Material: Type 303 Stainless Steel

Model: AW5030SS
Material: Type 303 Stainless Steel

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.

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

Dimensions and Airflow Pattern

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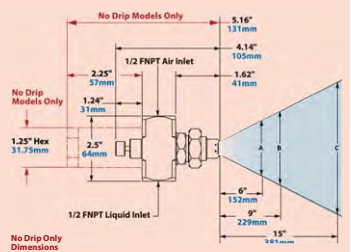

For more information about droplet size and spray angle, see page 97.

Model	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								
																Pressure		Width						Max. Depth feet/m
	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	A in	A cm	B in	B cm	C in	C cm	
AW5010SS	---	---	---	---	---	---	---	---	---	---	---	---	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	12.5	31.8	18	46	26	66	18	5.5
	---	---	---	---	---	---	---	---	---	---	---	---	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
	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	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
	---	---	---	---	---	---	34	2.3	15.6	59	29.6	838	50	3.4	20.4	77	39.1	1107	65	4.5	27	102	46.9	1328	---	---	---	---	---	---	80	5.5	55	3.8	13	33.0	17	43	20.5	52	45	13.7
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	429	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	1.0	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
	---	---	---	---	---	---	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	13.5	34.3	17	43	22	56	44	13.4

Air Atomizing Spray Nozzles

Internal Mix Flat Fan Pattern - 1/2 NPT

Model: AF5010SS
Material: Type 303 Stainless Steel

Model: AF5020SS
Material: Type 303 Stainless Steel

Model AF5010SS and AF5020SS

1/2 NPT internal mix flat fan pattern atomizing nozzles are designed with efficiency in mind. Especially good for vertical or horizontal assembly lines, the broad thin pattern of these larger atomizing nozzles makes efficient use of your expensive liquids. Their output can be adjusted for a very light film or a heavy coat of atomized liquid. 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.

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

Dimensions and Airflow Pattern

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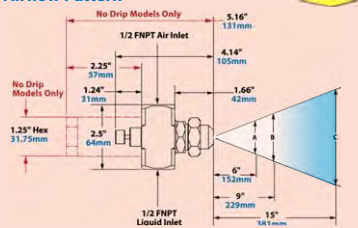

No Drip Only Dimensions in Red
See page 92 for No Drip Atomizing Nozzles

For more information about droplet size and spray angle, see page 97.

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

Model	Pressure: Air PSI/BAR	Pressure: Liquid PSI/BAR	Width: A in	Width: A cm	Width: B in	Width: B cm	Width: C in	Width: C cm	Max. Depth feet/m	
AF5010SS	20	1.4	10	0.7	25	64	34	86	45	114	14	4.3
	40	2.8	20	1.4	28	71	36	91	46	117	18	5.5
	50	3.4	25	1.7	29	74	38	97	48	122	22	6.7
	70	4.8	40	2.8	32	81	42	107	51	130	27	8.2
AF5020SS	10	0.7	5	0.3	21	53	27	69	36	91	13	4.0
	20	1.4	15	1.0	34	86	42	107	52	132	15	4.6
	44	3.0	35	2.4	39	99	47	119	64	163	19	5.8
	64	4.4	55	3.8	40	102	50	127	68	173	20	6.1

Model	5 PSI/0.3 BAR Liquid: Air Pressure PSI/BAR	GPH/LPH		SCFM/SLPM			15 PSI/1.0 BAR Liquid: Air Pressure PSI/BAR	GPH/LPH		SCFM/SLPM			25 PSI/1.7 BAR Liquid: Air Pressure PSI/BAR	GPH/LPH		SCFM/SLPM			35 PSI/2.4 BAR Liquid: Air Pressure PSI/BAR	GPH/LPH		SCFM/SLPM			55 PSI/3.8 BAR Liquid: Air Pressure 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

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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

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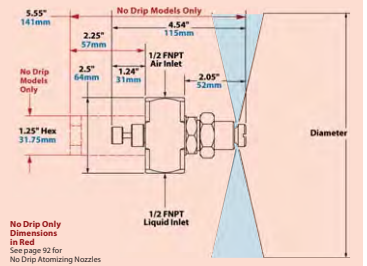
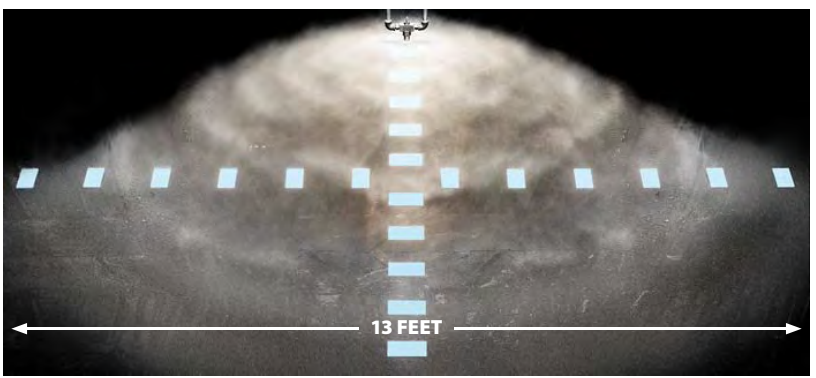


For more information about droplet size and spray angle, see page 97.



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

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		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
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	142
	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

Air Atomizing Spray Nozzles

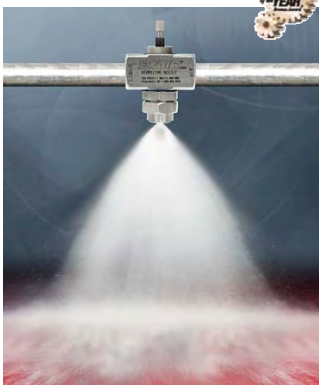
External Mix Narrow Angle Flat Fan Pattern - 1/2 NPT

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.

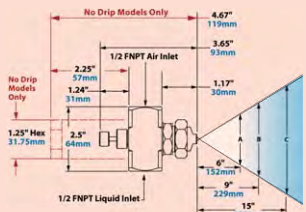


External mix narrow angle flat fan nozzles provide a high volume of liquid in a concentrated area.

See page 4 for complete details.

Dimensions and Airflow Pattern

DOWNLOAD drawings at EXAIR.com



No Drip Only Dimensions in Red

See page 92 for No Drip Atomizing Nozzles

For more information about droplet size and spray angle, see page 97.

Model	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									
	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: Air PSI/ BAR	Pressure: Liquid PSI/ BAR	Width: A in	Width: A cm	Width: B in	Width: B cm	Width: C in	Width: C cm	Max. Depth feet/m	
EF5010SS	30	2.1	141	30.2 854	40	2.8	186	36.6 1037	45	3.1	218	39.9 1130	55	3.8	264	46.4 1314	80	5.5	303	56.0 1586	35	2.4	3	0.2	15	38	18.5	47	22	56	25	7.6
	35	2.4		34.0 961	45	3.1		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

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An INTELLIGENT COMPRESSED AIR® Product

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.

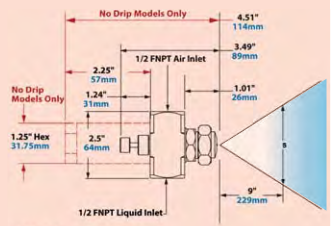
Use a siphon fed nozzle when no liquid pressure is available.

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



No Drip Only Dimensions in Red
See page 92 for No Drip Atomizing Nozzles

For more information about droplet size and spray angle, see page 97.

Liquid Flow in GPH/LPH

Model	Air Pressure PSI/BAR		Air SCFM/ SLPM		Gravity Head 18"	46cm	12"	30cm	6"	15cm	Siphon Height 4"	10cm	8"	20cm	12"	30cm	24"	61cm
SR5010SS	20	1.4	19.3	547	---	---	---	---	---	---	22.1	84	14.3	54	---	---	---	---
	30	2.1	25.2	714	---	---	---	---	---	---	28.6	108	25.7	97	12.3	47	---	---
	40	2.8	32.8	929	---	---	56.8	215	41	155	31.5	119	28.4	107	19.6	74	---	---
	50	3.4	36.7	1039	61	231	57.4	217	42.8	162	32.1	121	30.2	114	21.8	83	---	---
	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
	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
	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

Spray Dimensions at 8" (20cm) Siphon Height

Air Pressure PSI/BAR		Width B in	Width B cm	Max. Depth feet/m	
20	1.4	6	15	22	6.7
30	2.1			25	7.6
40	2.8			28	8.5
50	3.4			29	8.8
60	4.1			31	9.4
70	4.8			35	10.7
80	5.5			37	11.3

No Drip Air 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 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. **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.**

† Patent #9156045

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 for 1/4 and 1/2 NPT nozzles. 20 PSIG (1.4 BAR) is required for 1/8 NPT nozzles.

Mounting Brackets are available - Model 901786 for 1/8 NPT, Model 901318 for 1/4 NPT and Model 901556 for 1/2 NPT atomizing nozzles.

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

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No Drip Air Atomizing Spray Nozzles

An INTELLIGENT COMPRESSED AIR® Product

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	
AN9010SS	No Drip Internal Mix Narrow Angle Round Pattern Atomizing Nozzles, 2.63 GPH/9.96 LPH Max, 1/8 NPT
AN9020SS	No Drip Internal Mix Narrow Angle Round Pattern Atomizing Nozzles, 3.33 GPH/12.61 LPH Max, 1/8 NPT
AN9030SS	No Drip Internal Mix Narrow Angle Round Pattern Atomizing Nozzles, 6.3 GPH/23.85 LPH Max, 1/8 NPT
AN9040SS	No Drip Internal Mix Narrow Angle Round Pattern Atomizing Nozzles, 12.00 GPH/45.42 LPH Max, 1/8 NPT
AN9050SS	No Drip Internal Mix Narrow Angle Round Pattern Atomizing Nozzles, 18.93 GPH/71.66 LPH Max, 1/8 NPT
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	
AW9010SS	No Drip Internal Mix Wide Angle Round Pattern Atomizing Nozzles, 2.60 GPH/9.84 LPH Max, 1/8 NPT
AW9020SS	No Drip Internal Mix Wide Angle Round Pattern Atomizing Nozzles, 9.83 GPH/37.22 LPH Max, 1/8 NPT
AW9030SS	No Drip Internal Mix Wide Angle Round Pattern Atomizing Nozzles, 15.00 GPH/56.78 LPH Max, 1/8 NPT
AW9040SS	No Drip Internal Mix Wide Angle Round Pattern Atomizing Nozzles, 22.33 GPH/84.54 LPH Max, 1/8 NPT
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 Air Atomizing Spray Nozzles

NO DRIP INTERNAL MIX ATOMIZING NOZZLES

Model	Description
No Drip Internal Mix Flat Fan Pattern Atomizing Nozzles	
AF9010SS	No Drip Internal Mix Flat Fan Pattern Atomizing Nozzles, 3.47 GPH/13.12 LPH Max, 1/8 NPT
AF9020SS	No Drip Internal Mix Flat Fan Pattern Atomizing Nozzles, 4.27 GPH/16.15 LPH Max, 1/8 NPT
AF9030SS	No Drip Internal Mix Flat Fan Pattern Atomizing Nozzles, 17.00 GPH/64.35 LPH Max, 1/8 NPT
AF9040SS	No Drip Internal Mix Flat Fan Pattern Atomizing Nozzles, 28.00 GPH/105.99 LPH Max, 1/8 NPT
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

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

NO DRIP EXTERNAL MIX ATOMIZING NOZZLES

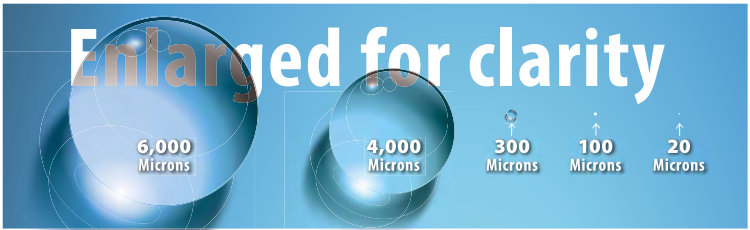
Model	Description
No Drip External Mix Round Pattern Atomizing Nozzles	
ER2010SS	No Drip External Mix Round Pattern Atomizing Nozzles, 3.8 GPH/14.4 LPH Max, 1/4 NPT
ER2020SS	No Drip External Mix Round Pattern Atomizing Nozzles, 7.5 GPH/28.4 LPH Max, 1/4 NPT
ER2030SS	No Drip External Mix Round Pattern 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	
EF9010SS	No Drip External Mix Narrow Angle Flat Fan Pattern Atomizing Nozzles, 2.00 GPH/7.57 LPH Max, 1/8 NPT
EF9020SS	No Drip External Mix Narrow Angle Flat Fan Pattern Atomizing Nozzles, 2.93 GPH/11.09 LPH Max, 1/8 NPT
EF9030SS	No Drip External Mix Narrow Angle Flat Fan Pattern Atomizing Nozzles, 7.67 GPH/29.03 LPH Max, 1/8 NPT
EF9040SS	No Drip External Mix Narrow Angle Flat Fan Pattern Atomizing Nozzles, 14.42 GPH/54.59 LPH Max, 1/8 NPT
EF9050SS	No Drip External Mix Narrow Angle Flat Fan Pattern Atomizing Nozzles, 25.00 GPH/94.64 LPH Max, 1/8 NPT
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 Air Atomizing Spray Nozzles

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

NO DRIP SIPHON FED ATOMIZING NOZZLES

Model	Description
No Drip Siphon Fed Round Pattern Atomizing Nozzles	
SR9010SS	No Drip Siphon Fed Round Pattern Atomizing Nozzles, 0.53 GPH/2.02 LPH Max, 1/8 NPT
SR9020SS	No Drip Siphon Fed Round Pattern Atomizing Nozzles, 0.96 GPH/3.63 LPH Max, 1/8 NPT
SR9030SS	No Drip Siphon Fed Round Pattern Atomizing Nozzles, 1.98 GPH/7.50 LPH Max, 1/8 NPT
SR9040SS	No Drip Siphon Fed Round Pattern Atomizing Nozzles, 4.09 GPH/15.48 LPH Max, 1/8 NPT
SR9050SS	No Drip Siphon Fed Round Pattern Atomizing Nozzles, 5.12 GPH/19.38 LPH Max, 1/8 NPT
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	
SF9010SS	No Drip Siphon Fed Flat Fan Pattern Atomizing Nozzles, 0.43 GPH/1.62 LPH Max, 1/8 NPT
SF9020SS	No Drip Siphon Fed Flat Fan Pattern Atomizing Nozzles, 1.52 GPH/5.75 LPH Max, 1/8 NPT
SF9030SS	No Drip Siphon Fed Flat Fan Pattern Atomizing Nozzles, 1.45 GPH/5.49 LPH Max, 1/8 NPT
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



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 µm = 1 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°
Internal Mix Deflected Flat Fan Pattern - AD1010SS, AD2010SS, etc.	67°	90°
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°

Liquid Atomizing Spray Nozzles

Pressurized liquid nozzles increase liquid flow for cooling, washing and rinsing!

What are Liquid Atomizing Spray Nozzles?

EXAIR's Liquid Atomizing Spray Nozzles require no air to operate. They produce droplets by spinning the liquid and breaking its surface tension through a precision orifice or by impacting the liquid on to a surface of the nozzle. Compared to EXAIR's Air Atomizing Spray Nozzles, liquid atomizing spray nozzles generate more liquid volume and produce a coarse spray pattern. The higher liquid flow rates benefit some common industrial applications like cleaning, cooling, rinsing, dust suppression and washing. Many liquid atomizing spray nozzles operate well when the liquid they are spraying contains particulate or is a slurry.

Why Liquid Atomizing Spray Nozzles?

They are good general-purpose nozzles for industry and are commonly used with inexpensive liquids like water, rinse aids or detergents while also very effective with chemicals, pesticides and herbicides. Adjustment of the liquid flow rate can be done with varying liquid pressure but without the same adjustability or refinement of Air Atomizing Spray Nozzles. Their smaller footprint allows for mounting in smaller spaces and with less plumbing required, since no air line is needed. Liquid nozzles, made of Type 303 stainless steel are durable and rugged, with no moving parts and have a maximum operating temperature of 800°F (427°C).

See page 4 for complete details.

Applications

- Cooling
- Quenching
- Coating
- Dust suppression
- Washing
- Rinsing
- Foam breaking
- Slurry spraying
- Sanitizing
- Degreasing
- Lubricating

Advantages

- High liquid flow rates
- Increase the liquid's surface area
- Increase the liquid coverage area on your target
- All stainless steel construction
- Compact footprint
- Versatile

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FullStream™ Cone Nozzles - 1/4 NPT

Model: FL1008SS
Material: Type 303 Stainless Steel

Model: FL1010SS
Material: Type 303 Stainless Steel

Model: FL1011SS
Material: Type 303 Stainless Steel

Model FL1008SS, FL1010SS and FL1011SS

EXAIR's 1/4 NPT FullStream Cone Nozzles, with a full cone spray pattern, are among the most common type of spray nozzles. Full cone spray nozzles are applied to solve cooling, cleaning, washing, rinsing and dust suppression applications throughout industry. Their tangential flow design is vaneless, which creates wide open internal features to resist clogging. This produces a uniform distribution in a full cone round pattern and medium to large droplets. Their right-angle design is compact and operates at up to 250 PSI liquid pressure. FullStream nozzles also work well with liquids containing particulate.

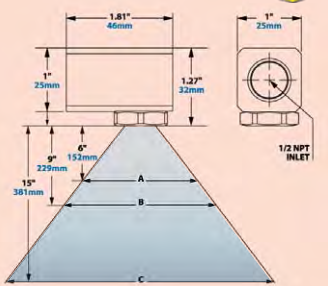
Compared to EXAIR's Air Atomizing Spray Nozzles the FullStream will have higher liquid flow rates.

For maximum liquid conservation and spray control visit page 70.

1/4 NPT FullStream Cone Nozzle with cone spray pattern is rinsing anodized aluminium pipe.

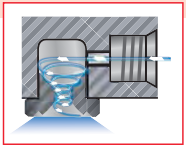
Dimensions and Airflow Pattern

DOWNLOAD drawings at EXAIR.com



How FullStream and HollowStream Cone Nozzles Work

With FullStream and HollowStream nozzles, the atomizing fluid is supplied into the body of the nozzle creating a swirling action within the vortex chamber. This vortex produces a full cone spray pattern when the precisely machined nozzle breaks the liquid surface tension as it exits the orifice at a controlled spray angle.



FullStream Cone Nozzles													Spray Angle						
Inlet Connection	Model	Capacity	Max Free Passage	Flow Rate GPM/LPM									Inlet Pressure PSI/BAR		Width A		Width B		Width C	
						3 psi	5 psi	7 psi	10 psi	20 psi	40 psi	60 psi			in	cm	in	cm	in	cm
1/4 NPT	FL1008SS	8	0.109"	GPM		0.50	0.60	0.70	0.80	1.15	1.55	1.80	7	0.5	5.7	14	8.6	22	14.3	36
													20	1.4	7.4	19	11.0	28	18.4	47
				LPM		1.89	2.27	2.65	3.03	4.35	5.87	6.81	60	4.1	8.4	21	12.6	32	21.0	53
	FL1010SS	10	0.125"	GPM		0.48	0.67	0.83	1.00	1.34	1.88	2.36	7	0.5	6.8	17	10.2	26	17.0	43
													20	1.4	8.7	22	13.1	33	21.8	55
				LPM		1.82	2.54	3.14	3.79	5.07	7.12	8.93	60	4.1	10.1	26	15.1	38	25.2	64
	FL1011SS	11	0.144"	GPM		0.62	0.85	0.96	1.10	1.51	2.21	2.66	7	0.5	6.8	17	10.2	26	17.0	43
													20	1.4	8.7	22	13.1	33	21.8	55
				LPM		2.35	3.22	3.63	4.16	5.72	8.36	10.07	60	4.1	10.1	26	15.1	38	25.2	64

FullStream™ Cone Nozzles - 3/8 NPT

Model: FL3011SS
Material: Type 303 Stainless Steel

Model: FL3013SS
Material: Type 303 Stainless Steel

Model: FL3016SS
Material: Type 303 Stainless Steel

Model: FL3020SS
Material: Type 303 Stainless Steel

Model: FL3023SS
Material: Type 303 Stainless Steel

Model: FL3026SS
Material: Type 303 Stainless Steel

Model: FL3029SS
Material: Type 303 Stainless Steel

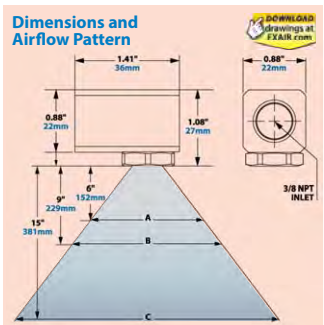
Model FL3011SS, FL3013SS, FL3016SS, FL3020SS, FL3023SS, FL3026SS and FL3029SS

EXAIR's 3/8 FullStream Cone Nozzles, with a full cone spray pattern, are among the most common type of spray nozzles. Full cone spray nozzles are applied to solve cooling, cleaning, washing, rinsing and dust suppression applications throughout industry. Their tangential flow design is vaneless, which creates wide open internal features to resist clogging. This produces a uniform distribution in a full cone round pattern and medium to large droplets. Their right-angle design is compact and operates at up to 250 PSI liquid pressure. FullStream nozzles also work well with liquids containing particulate.

Compared to EXAIR's Air Atomizing Spray Nozzles the FullStream will have higher liquid flow rates.

For maximum liquid conservation and spray control visit page 70.

Dimensions and Airflow Pattern



3/8 NPT FullStream Cone Nozzle washing the inside of a 55 gallon drum.

FullStream Cone Nozzles

Inlet Connection	Model	Capacity	Max Free Passage	Flow Rate GPM/LPM	3 psi	5 psi	7 psi	10 psi	20 psi	40 psi	60 psi
3/8 NPT	FL3011SS	11	0.128"	GPM	0.57	0.76	0.91	1.10	1.52	2.20	2.70
				LPM	2.16	2.88	3.44	4.16	5.75	8.33	10.22
	FL3013SS	13	0.144"	GPM	0.75	0.95	1.13	1.30	1.86	2.60	3.34
				LPM	2.84	3.60	4.28	4.92	7.04	9.84	12.64
	FL3016SS	16	0.154"	GPM	0.98	1.10	1.25	1.60	2.23	2.90	3.60
				LPM	3.71	4.16	4.73	6.06	8.44	10.98	13.63
	FL3020SS	20	0.172"	GPM	1.22	1.64	1.88	2.00	2.98	4.24	4.82
				LPM	4.62	6.21	7.12	7.57	11.28	16.05	18.24
	FL3023SS	23	0.189"	GPM	1.36	1.76	1.96	2.30	3.18	4.56	5.38
				LPM	5.15	6.66	7.42	8.71	12.04	17.26	20.36
	FL3026SS	26	0.204"	GPM	1.26	1.80	2.02	2.60	3.30	5.18	6.12
				LPM	4.77	6.81	7.65	9.84	12.49	19.61	23.17
	FL3029SS	29	0.221"	GPM	1.30	1.84	2.28	2.90	3.62	5.48	6.48
				LPM	4.92	6.97	8.63	10.98	13.70	20.74	24.53

Spray Angle

Inlet Pressure PSI/BAR		Width A in	A cm	B in	B cm	C in	C cm
7	0.5	8.1	21	12.1	31	20.2	51
20	1.4	9.9	25	14.8	38	24.7	63
60	4.1	10.4	26	15.6	40	26.1	66
7	0.5	7.6	19	11.5	29	19.1	49
20	1.4	9.0	23	13.6	35	22.6	57
60	4.1	10.4	26	15.6	40	26.1	66
7	0.5	7.6	19	11.5	29	19.1	49
20	1.4	9.7	25	14.6	37	24.3	62
60	4.1	10.4	26	15.6	40	26.1	66
7	0.5	8.4	21	12.6	32	21.0	53
20	1.4	9.9	25	14.8	38	24.7	63
60	4.1	11.2	28	16.8	43	28.0	71
7	0.5	9.0	23	13.6	35	22.6	57
20	1.4	10.2	26	15.4	39	25.6	65
60	4.1	11.2	28	16.8	43	18.0	46
7	0.5	9.7	25	14.6	37	24.3	62
20	1.4	10.8	27	16.2	41	27.0	69
60	4.1	12.0	30	18.0	46	30.0	76
7	0.5	9.9	25	14.8	38	24.7	63
20	1.4	10.8	27	16.2	41	27.0	69
60	4.1	12.0	30	18.0	46	30.0	76

For Technical Assistance, Call An EXAIR Application Engineer 1-800-903-9247
Toll Free FAX (866) 329-3924 • E-mail: techelp@exair.com • www.exair.com

FullStream™ Cone Nozzles - 1/2 NPT

Model: FL5032SS
Material: Type 303 Stainless Steel

Model: FL5040SS
Material: Type 303 Stainless Steel

Model: FL5048SS
Material: Type 303 Stainless Steel

Model: FL5056SS
Material: Type 303 Stainless Steel

Model: FL5064SS
Material: Type 303 Stainless Steel

Model: FL5072SS
Material: Type 303 Stainless Steel

Model FL5032SS, FL5040SS, FL5048SS, FL5056SS, FL5064SS and FL5072SS

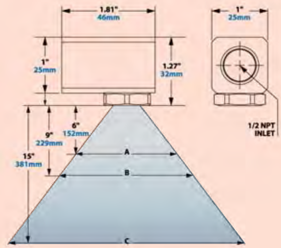
EXAIR's 1/2 NPT FullStream Cone Nozzles, with a full cone spray pattern, are among the most common type of spray nozzles. Full cone spray nozzles are applied to solve cooling, cleaning, washing, rinsing and dust suppression applications throughout industry. Their tangential flow design is vaneless, which creates wide open internal features to resist clogging. This produces a uniform distribution in a full cone round pattern and medium to large droplets. Their right-angle design is compact and operates at up to 250 PSI liquid pressure. FullStream nozzles also work well with liquids containing particulate.

Compared to EXAIR's Air Atomizing Spray Nozzles the FullStream will have higher liquid flow rates.

For maximum liquid conservation and spray control visit page 70.

Dimensions and Airflow Pattern

DOWNLOAD drawings at EXAIR.com



1/2 NPT FullStream Cone Nozzle with cone spray pattern is cleaning red potatoes.

FullStream Cone Nozzles

Inlet Connection	Model	Capacity	Max Free Passage		Flow Rate GPM/LPM 3 psi	5 psi	7 psi	10 psi	20 psi	40 psi	60 psi
1/2 NPT	FL5032SS	32	0.201"	GPM	1.74	2.46	2.80	3.20	4.46	6.28	7.30
				LPM	6.59	9.31	10.60	12.11	16.88	23.77	27.63
	FL5040SS	40	0.242"	GPM	2.68	3.14	3.52	4.00	5.60	7.80	8.76
				LPM	10.14	11.89	13.32	15.14	21.20	29.53	33.16
	FL5048SS	48	0.281"	GPM	3.06	3.56	3.96	4.80	6.81	9.58	11.73
				LPM	11.28	13.48	15.00	18.17	25.78	39.26	44.40
	FL5056SS	56	0.295"	GPM	3.32	4.18	4.67	5.60	7.89	11.22	13.74
				LPM	12.57	15.82	17.68	21.20	29.87	42.47	52.01
	FL5064SS	64	0.328"	GPM	3.50	4.50	5.15	6.40	9.13	12.70	15.81
				LPM	13.25	17.03	19.49	24.23	34.56	48.07	59.85
	FL5072SS	72	0.359"	GPM	4.08	5.00	6.17	7.20	10.17	14.40	17.64
				LPM	15.44	18.93	23.36	27.25	38.50	54.51	66.77

Spray Angle

Inlet Pressure PSI	Inlet Pressure BAR	Width A in	A cm	B in	B cm	C in	C cm
7	0.5	9.4	23.9	14.1	35.81	23.4	59.4
20	1.4	10.1	25.7	15.1	38.3	25.2	64.0
60	4.1	12.0	30.5	18.0	45.7	30.0	76.2
7	0.5	10.1	25.7	15.1	38.4	25.2	64.0
20	1.4	12.0	30.5	18.0	45.7	30.0	76.2
60	4.1	13.1	33.3	19.6	49.8	32.7	83.1
7	0.5	10.1	25.7	15.1	38.4	25.2	64.0
20	1.4	12.0	30.5	18.0	45.7	30.0	76.2
60	4.1	13.1	33.3	19.6	49.8	32.7	83.1
7	0.5	11.0	28.0	16.5	42.0	27.5	69.9
20	1.4	12.0	30.5	18.0	45.7	30.0	76.2
60	4.1	13.1	33.3	19.6	49.8	32.7	83.1
7	0.5	11.0	28.0	16.5	42.0	27.5	69.9
20	1.4	12.0	30.5	18.0	45.7	30.0	76.2
60	4.1	13.1	33.3	19.6	49.8	32.7	83.1
7	0.5	11.0	28.0	16.5	42.0	27.5	69.9
20	1.4	12.0	30.5	18.0	45.7	30.0	76.2
60	4.1	13.1	33.3	19.6	49.8	32.7	83.1

HollowStream™ Cone Nozzles – 1/4 NPT

Model: HL1001SS
Material: Type 303 Stainless Steel

Model: HL1002SS
Material: Type 303 Stainless Steel

Model: HL1003SS
Material: Type 303 Stainless Steel

Model: HL1005SS
Material: Type 303 Stainless Steel

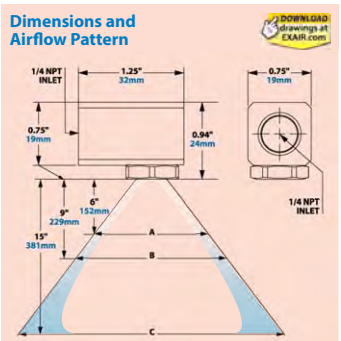
Model: HL1008SS
Material: Type 303 Stainless Steel

Model: HL1011SS
Material: Type 303 Stainless Steel

Model HL1001SS, HL1002SS, HL1003SS, HL1005SS, HL1008SS and HL1011SS

EXAIR's 1/4 NPT HollowStream Cone Nozzles produce a ring of liquid upon your target and are among the most common type of spray nozzles. Hollow cone spray nozzles generally use less liquid than full cone spray nozzles. These nozzles will be used when cooling, cleaning, washing, rinsing and dust suppression can be achieved with less liquid than a full cone nozzle. Their tangential flow design is vaneless which creates wide open internal features to resist clogging. They produce a uniform distribution in a hollow cone round pattern and medium to large droplets. The right-angle design is compact and operates at up to 250 PSI liquid pressure. HollowStream nozzles also work well with liquids containing particulate.

Dimensions and Airflow Pattern



Compared to EXAIR's Air Atomizing Spray Nozzles the HollowStream will have higher liquid flow rates.

For maximum liquid conservation and spray control visit page 70.

See page 99 for How the FullStream and HollowStream Cone Nozzles Work.

HollowStream Cone Nozzles

Inlet Connection	Model	Capacity	Max Free Passage		Flow Rate GPM/LPM 3 psi	5 psi	7 psi	10 psi	20 psi	40 psi	60 psi
1/4 NPT	HL1001SS	1	0.052"	GPM	0.06	0.07	0.09	0.10	0.13	0.18	0.21
				LPM	0.23	0.26	0.34	0.38	0.49	0.68	0.79
	HL1002SS	2	0.086"	GPM	0.14	0.17	0.19	0.20	0.27	0.38	0.46
				LPM	0.53	0.64	0.72	0.76	1.02	1.44	1.74
	HL1003SS	3	0.109"	GPM	0.20	0.24	0.28	0.32	0.45	0.63	0.77
				LPM	0.76	0.91	1.06	1.21	1.70	2.38	2.91
	HL1005SS	5	0.120"	GPM	0.27	0.35	0.39	0.49	0.65	0.91	1.12
				LPM	1.02	1.32	1.47	1.85	2.46	3.44	4.23
	HL1008SS	8	0.166"	GPM	0.46	0.59	0.73	0.80	1.16	1.60	2.04
				LPM	1.74	2.23	2.76	3.02	4.38	6.05	7.71
	HL1011SS	11	0.180"	GPM	0.65	0.81	0.93	1.10	1.47	2.03	2.50
				LPM	2.46	3.06	3.52	4.16	5.56	7.67	9.45

Spray Angle

Inlet Pressure PSI/BAR		Width A in	A cm	B in	B cm	C in	C cm
7	0.5	4.8	12.3	6.1	15.5	7.8	19.8
20	1.4	7.3	18.5	9.2	23.3	11.7	29.7
60	4.1	12.1	30.8	15.3	38.8	19.5	49.5
7	0.5	6.1	15.5	8.6	21.7	11.2	28.4
20	1.4	9.2	23.3	12.8	32.6	16.8	42.6
60	4.1	15.3	38.8	21.4	54.4	28.0	71.1
7	0.5	6.8	17.2	10.4	26.5	13.3	33.9
20	1.4	10.2	25.9	15.6	39.7	20.0	50.8
60	4.1	17.0	43.1	26.1	66.2	33.3	84.6
7	0.5	8.4	21.3	9.7	24.7	14.3	36.3
20	1.4	12.6	32.0	14.6	37.0	21.5	54.5
60	4.1	21.0	53.4	24.3	61.7	35.8	90.8
7	0.5	7.1	18.0	7.8	19.8	10.1	25.6
20	1.4	10.6	26.9	11.7	29.7	15.1	38.4
60	4.1	17.7	44.9	19.5	49.5	25.2	63.9
7	0.5	9.5	24.2	12.0	30.5	14.8	37.6
20	1.4	14.3	36.4	18.0	45.7	22.2	56.5
60	4.1	23.9	60.6	30.0	76.2	37.0	94.1

For Technical Assistance, Call An EXAIR Application Engineer 1-800-903-9247
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