# Air Atomizing Spray Nozzles

## All stainless steel construction for durability and corrosion resistance!

### What Are Atomizing Nozzles?

Built to Last 5 yr. WARRANTY

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.

*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 95.

## 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

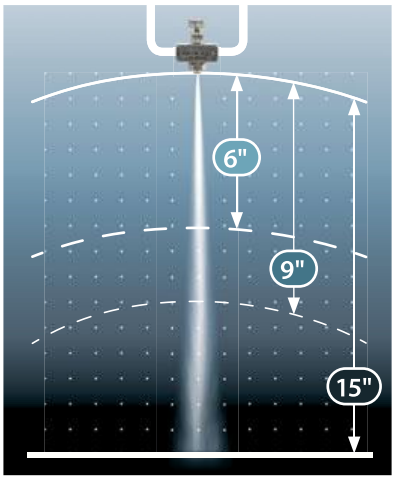
**Model: AN8040SS**
**Material:** Type 303 Stainless Steel

**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.

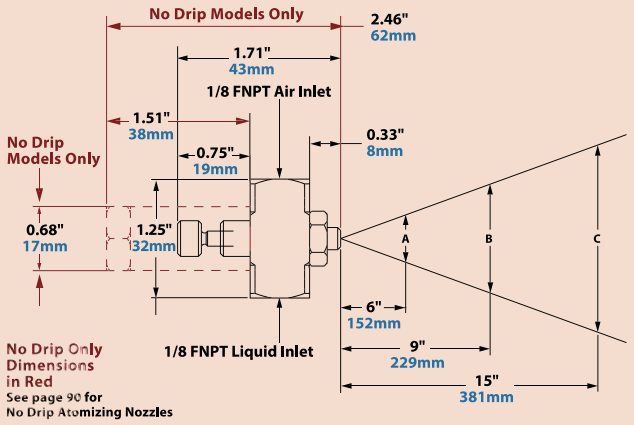
**For pressure fed applications not requiring independent air and liquid control.**




**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 95.



| 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 | |
| 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 |
| | 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 |
| | 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 |
| | --- | --- | --- | --- | --- | --- | 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 |
| 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 |
| | 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 |
| | 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 |
| | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 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 |
| 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 |
| | 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 |
| | 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 |
| | 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 |
| 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 |
| | 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 |
| | 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 |
| | 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 |
| 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 |
| | 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 |
| | 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 |
| | --- | --- | --- | --- | --- | --- | 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 |

| Spray Dimensions | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pressure | | | | Width | | | | | | | | | | |
| Air PSI/BAR | | Liquid PSI/BAR | | A | | B | | C | | Max. Depth feet/m | |
| | | | | in | cm | in | cm | in | cm | | |
| 10 | 0.7 | 10 | 0.7 | 3 | 8 | 3.5 | 9 | 4.5 | 11 | 3.5 | 1.1 |
| 18 | 1.2 | 20 | 1.4 | 3 | 8 | 4 | 10 | 5 | 13 | 5 | 1.5 |
| 32 | 2.2 | 30 | 2.1 | 3 | 8 | 4 | 10 | 5.5 | 14 | 7 | 2.1 |
| 48 | 3.3 | 40 | 2.8 | 3 | 8 | 4.5 | 11 | 6 | 15 | 8 | 2.4 |
| 10 | 0.7 | 10 | 0.7 | 2 | 5 | 3 | 8 | 4 | 10 | 5 | 1.5 |
| 20 | 1.4 | 20 | 1.4 | 2.5 | 6 | 3.5 | 9 | 4.5 | 11 | 7 | 2.1 |
| 32 | 2.2 | 30 | 2.1 | 2.5 | 6 | 3.5 | 9 | 4.5 | 11 | 7 | 2.1 |
| 70 | 4.8 | 60 | 4.1 | 3.5 | 9 | 4.5 | 11 | 6.5 | 17 | 10 | 3.0 |
| 12 | 0.8 | 10 | 0.7 | 2 | 5 | 3 | 8 | 4.5 | 11 | 6 | 1.8 |
| 26 | 1.8 | 20 | 1.4 | 2.5 | 6 | 3.5 | 9 | 5 | 13 | 6 | 1.8 |
| 52 | 3.6 | 40 | 2.8 | 3 | 8 | 4 | 10 | 6 | 15 | 11 | 3.4 |
| 70 | 4.8 | 60 | 4.1 | 4 | 10 | 5 | 13 | 6.5 | 17 | 11 | 3.4 |
| 16 | 1.1 | 10 | 0.7 | 2.5 | 6 | 3 | 8 | 4 | 10 | 10 | 3.0 |
| 32 | 2.2 | 20 | 1.4 | 3 | 8 | 4 | 10 | 5.5 | 14 | 11 | 3.4 |
| 80 | 5.5 | 40 | 2.8 | 3 | 8 | 4 | 10 | 5.5 | 14 | 13 | 4.0 |
| 100 | 6.9 | 60 | 4.1 | 3.5 | 9 | 4.5 | 11 | 6 | 15 | 15 | 4.6 |
| 12 | 0.8 | 10 | 0.7 | 3 | 8 | 4 | 10 | 6 | 15 | 9 | 2.7 |
| 22 | 1.5 | 20 | 1.4 | 3 | 8 | 4 | 10 | 6 | 15 | 11 | 3.4 |
| 38 | 2.6 | 30 | 2.1 | 3 | 8 | 4.5 | 11 | 6 | 15 | 14 | 4.3 |
| 85 | 5.9 | 60 | 4.1 | 4 | 10 | 5 | 13 | 6.5 | 17 | 16 | 4.9 |

## Internal Mix Wide Angle Round Pattern - 1/8 NPT

**Model: AW8010SS**
**Material:** Type 303 Stainless Steel

**Model: AW8020SS**
**Material:** Type 303 Stainless Steel

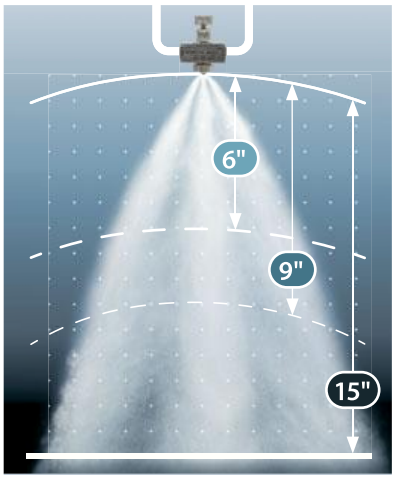
**Model: AW8030SS**
**Material:** Type 303 Stainless Steel

**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.

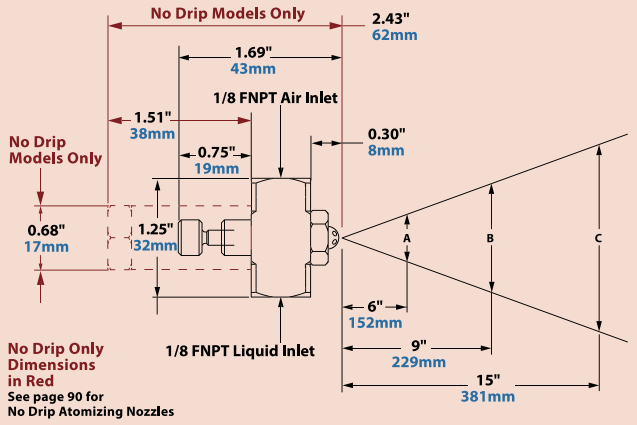
**For pressure fed applications not requiring independent air and liquid control.**




**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 95.

| 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 | |
| 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 |
| | 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 |
| | --- | --- | --- | --- | --- | --- | 22 | 1.5 | 0.60 | 2.3 | 0.60 | 16.9 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 65 | 4.5 | 0.60 | 2.3 | 1.56 | 44.2 |
| | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 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 |
| | 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 |
| | --- | --- | --- | --- | --- | --- | 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 |
| | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 52 | 3.6 | 4.27 | 16.2 | 4.82 | 136.5 | 75 | 5.2 | 5.47 | 20.7 | 6.47 | 183 |
| 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 | 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 |
| | 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 |
| | --- | --- | --- | --- | --- | --- | 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 |
| 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 |
| | 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 |
| | 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 | --- | --- | --- | --- | --- | --- |
| | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |

| Model | Spray Dimensions | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Pressure | | | | Width | | | | | | | | Max. Depth | |
| | Air PSI/BAR | | Liquid PSI/BAR | | A | | B | | C | | | | | |
| | | | | | in | cm | in | cm | in | cm | | | | |
| AW8010SS | 8 | 0.6 | 10 | 0.7 | 5 | 13 | 6.5 | 17 | 7.5 | 19 | 2 | 0.6 | | |
| | 16 | 1.1 | 20 | 1.4 | 6 | 15 | 8 | 20 | 10 | 25 | 3 | 0.9 | | |
| | 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 | 10 | 0.7 | 8 | 20 | 9.5 | 24 | 11 | 28 | 6 | 1.8 | | |
| | 24 | 1.7 | 20 | 1.4 | 8 | 20 | 10 | 25 | 13 | 33 | 8 | 2.4 | | |
| | 36 | 2.5 | 30 | 2.1 | 8 | 20 | 10 | 25 | 13 | 33 | 10 | 3.0 | | |
| | 75 | 5.2 | 60 | 4.1 | 8 | 20 | 10 | 25 | 13 | 33 | 14 | 4.3 | | |
| AW8030SS | 12 | 0.8 | 10 | 0.7 | 7.5 | 19 | 10 | 25 | 13.5 | 34 | 8 | 2.3 | | |
| | 22 | 1.5 | 20 | 1.4 | 7.5 | 19 | 10 | 25 | 13.5 | 34 | 9 | 2.7 | | |
| | 36 | 2.5 | 30 | 2.1 | 7.5 | 19 | 10 | 25 | 13.5 | 34 | 10 | 3.0 | | |
| | 50 | 3.4 | 40 | 2.8 | 7.5 | 19 | 10 | 25 | 13.5 | 34 | 11 | 3.4 | | |
| AW8040SS | 18 | 1.2 | 10 | 0.7 | 8 | 20 | 10.5 | 27 | 12 | 30 | 9 | 2.7 | | |
| | 38 | 2.6 | 20 | 1.4 | 8 | 20 | 10 | 25 | 12 | 30 | 11 | 3.4 | | |
| | 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
blog.exair.com @EXAIR

## Internal Mix Flat Fan Pattern - 1/8 NPT

**Model: AF8010SS**
**Material:** Type 303 Stainless Steel

**Model: AF8020SS**
**Material:** Type 303 Stainless Steel

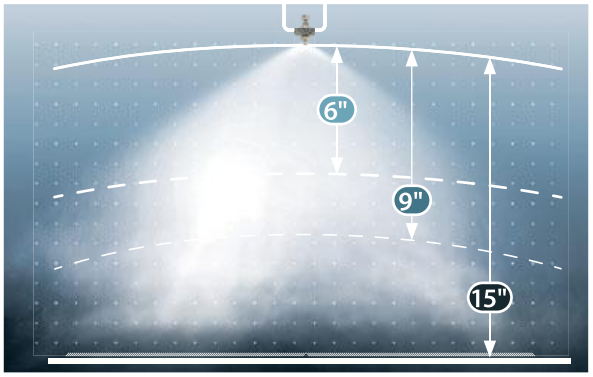
**Model: AF8030SS**
**Material:** Type 303 Stainless Steel

**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.**



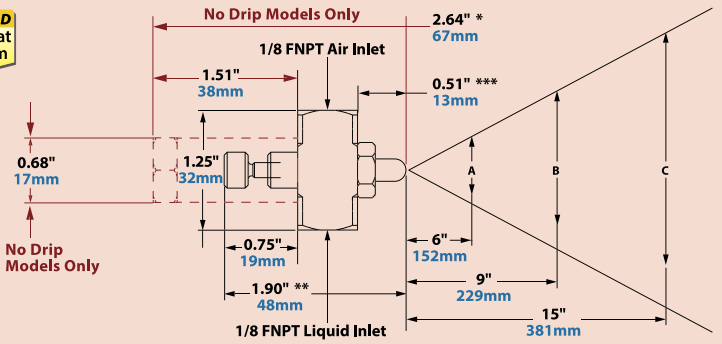
## Dimensions and Airflow Pattern

DOWNLOAD drawings at EXAIR.com

**No Drip Dimensions In Red**
See page 90 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 95.




| 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 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 | |
| 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 |

## 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

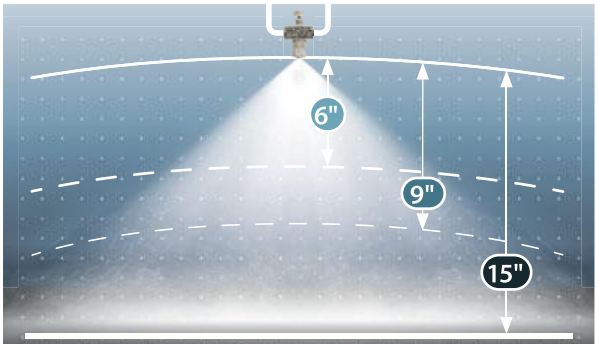
**Model: EF8040SS**
**Material:** Type 303 Stainless Steel

**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.**

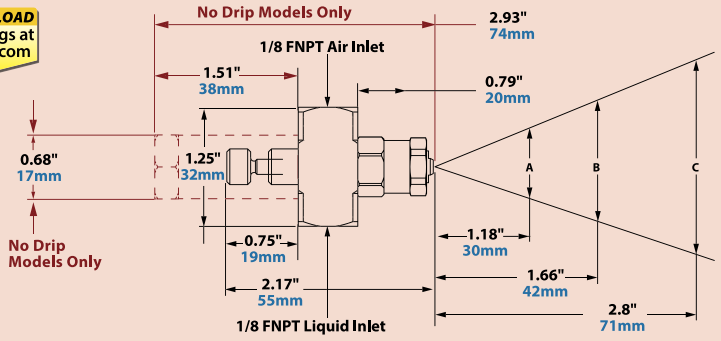



**1/8 NPT External Mix Flat Fan atomizing nozzles are very versatile. They can apply a light or heavy film coating to products on a variety of different products.**

**Model EF8010SS applies lubricant to a drawer slide.**

### Dimensions and Airflow Pattern

DOWNLOAD drawings at EXAIR.com




**No Drip Dimensions In Red**
See page 90 for No Drip Atomizing Nozzles

For more information about droplet size and spray angle, see page 95.

| 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 | | Spray Dimensions: Pressure Air PSI/BA R | | 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 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EF8010SS | 10 | 0.7 | 1.22 | 4.6 | 1.20 | 34.0 | 10 | 0.7 | 1.64 | 6.2 | 1.20 | 34.0 | 10 | 0.7 | 1.82 | 6.9 | 1.20 | 34.0 | 10 | 0.7 | 2.00 | 7.6 | 1.20 | 34.0 | 10 | 0.7 | 10 | 0.7 | 4 | 10 | 5 | 13 | 4 | 10 | 4 | 1.2 |
| | 30 | 2.1 | | | 2.29 | 64.8 | 30 | 2.1 | | | 2.29 | 64.8 | 30 | 2.1 | | | 2.29 | 64.8 | 30 | 2.1 | | | 2.29 | 64.8 | 30 | 2.1 | 20 | 1.4 | 4 | 10 | 5 | 13 | 6 | 15 | 6 | 1.8 |
| | 50 | 3.4 | | | 3.41 | 96.5 | 50 | 3.4 | | | 3.41 | 96.5 | 50 | 3.4 | | | 3.41 | 96.5 | 50 | 3.4 | | | 3.41 | 96.5 | 30 | 2.1 | 30 | 2.1 | 4 | 10 | 5 | 13 | 6 | 15 | 6 | 1.8 |
| | --- | --- | | | --- | --- | --- | --- | | | --- | --- | --- | --- | | | --- | --- | --- | --- | | | --- | --- | 50 | 3.4 | 40 | 2.8 | 4 | 10 | 5 | 13 | 8 | 20 | 8 | 2.4 |
| EF8020SS | 10 | 0.7 | 2.00 | 7.6 | 1.20 | 34.0 | 10 | 0.7 | 2.56 | 9.7 | 1.20 | 34.0 | 10 | 0.7 | 2.67 | 10.1 | 1.20 | 34.0 | 10 | 0.7 | 2.93 | 11.1 | 1.20 | 34.0 | 10 | 0.7 | 10 | 0.7 | 3 | 8 | 4.5 | 11 | 4 | 10 | 4 | 1.2 |
| | 30 | 2.1 | | | 2.29 | 64.8 | 30 | 2.1 | | | 2.29 | 64.8 | 30 | 2.1 | | | 2.29 | 64.8 | 30 | 2.1 | | | 2.29 | 64.8 | 30 | 2.1 | 20 | 1.4 | 3 | 8 | 4.5 | 11 | 6 | 15 | 6 | 1.8 |
| | 50 | 3.4 | | | 3.41 | 96.5 | 50 | 3.4 | | | 3.41 | 96.5 | 50 | 3.4 | | | 3.41 | 96.5 | 50 | 3.4 | | | 3.41 | 96.5 | 30 | 2.1 | 30 | 2.1 | 3 | 8 | 4.5 | 11 | 7 | 18 | 7 | 2.1 |
| | --- | --- | | | --- | --- | --- | --- | | | --- | --- | --- | --- | | | --- | --- | --- | --- | | | --- | --- | 50 | 3.4 | 40 | 2.8 | 3 | 8 | 4.5 | 11 | 8 | 20 | 8 | 2.4 |
| EF8030SS | 10 | 0.7 | 4.47 | 16.9 | 1.20 | 34.0 | 10 | 0.7 | 5.60 | 21.2 | 1.20 | 34.0 | 10 | 0.7 | 6.30 | 23.8 | 1.20 | 34.0 | 10 | 0.7 | 7.67 | 29.0 | 1.20 | 34.0 | 10 | 0.7 | 10 | 0.7 | 4 | 10 | 5 | 13 | 5 | 13 | 5 | 1.5 |
| | 30 | 2.1 | | | 2.29 | 64.8 | 30 | 2.1 | | | 2.29 | 64.8 | 30 | 2.1 | | | 2.29 | 64.8 | 30 | 2.1 | | | 2.29 | 64.8 | 30 | 2.1 | 20 | 1.4 | 4 | 10 | 5 | 13 | 7 | 18 | 7 | 2.1 |
| | 50 | 3.4 | | | 3.41 | 96.5 | 50 | 3.4 | | | 3.41 | 96.5 | 50 | 3.4 | | | 3.41 | 96.5 | 50 | 3.4 | | | 3.41 | 96.5 | 30 | 2.1 | 30 | 2.1 | 4 | 10 | 5 | 13 | 8 | 20 | 8 | 2.4 |
| | --- | --- | | | --- | --- | --- | --- | | | --- | --- | --- | --- | | | --- | --- | --- | --- | | | --- | --- | 50 | 3.4 | 40 | 2.8 | 4 | 10 | 5 | 13 | 9 | 23 | 9 | 2.7 |
| EF8040SS | 20 | 1.4 | 8.67 | 32.8 | 1.95 | 55.2 | 20 | 1.4 | 10.75 | 40.7 | 1.95 | 55.2 | 20 | 1.4 | 13.00 | 49.2 | 1.95 | 55.2 | 20 | 1.4 | 14.42 | 54.6 | 1.95 | 55.2 | 20 | 1.4 | 10 | 0.7 | 5.5 | 14 | 7 | 18 | 7 | 18 | 7 | 2.1 |
| | 30 | 2.1 | | | 2.50 | 70.8 | 30 | 2.1 | | | 2.5 | 70.8 | 30 | 2.1 | | | 2.5 | 70.8 | 30 | 2.1 | | | 2.5 | 70.8 | 30 | 2.1 | 20 | 1.4 | 5.5 | 14 | 7 | 18 | 9 | 23 | 9 | 2.7 |
| | 40 | 2.8 | | | 3.13 | 88.6 | 40 | 2.8 | | | 3.13 | 88.6 | 40 | 2.8 | | | 3.13 | 88.6 | 40 | 2.8 | | | 3.13 | 88.6 | 40 | 2.8 | 30 | 2.1 | 5.5 | 14 | 7 | 18 | 10 | 25 | 10 | 3.0 |
| | 50 | 3.4 | | | 3.68 | 104.2 | 50 | 3.4 | | | 3.68 | 104.2 | 50 | 3.4 | | | 3.68 | 104.2 | 50 | 3.4 | | | 3.68 | 104 | 50 | 3.4 | 40 | 2.8 | 5.5 | 14 | 7 | 18 | 11 | 28 | 11 | 3.4 |
| EF8050SS | 30 | 2.1 | 12.6 | 47.7 | 2.28 | 64.5 | 30 | 2.1 | 16.6 | 62.8 | 2.28 | 64.5 | 30 | 2.1 | 20.17 | 76.4 | 2.28 | 64.5 | 30 | 2.1 | 25.00 | 94.6 | 2.28 | 64.5 | 30 | 2.1 | 10 | 0.7 | 7 | 18 | 9 | 23 | 9 | 23 | 9 | 2.7 |
| | 40 | 2.8 | | | 2.84 | 80.4 | 40 | 2.8 | | | 2.84 | 80.4 | 40 | 2.8 | | | 2.84 | 80.4 | 40 | 2.8 | | | 2.84 | 80.4 | 40 | 2.8 | 20 | 1.4 | 7 | 18 | 9 | 23 | 10 | 25 | 10 | 3.0 |
| | 60 | 4.1 | | | 3.87 | 109.6 | 60 | 4.1 | | | 3.87 | 109.6 | 60 | 4.1 | | | 3.87 | 109.6 | 60 | 4.1 | | | 3.87 | 110 | 60 | 4.1 | 40 | 2.8 | 7 | 18 | 9 | 23 | 12 | 30 | 12 | 3.7 |
| | 70 | 4.8 | | | 4.45 | 126.0 | 70 | 4.8 | | | 4.45 | 126.0 | 70 | 4.8 | | | 4.45 | 126.0 | 70 | 4.8 | | | 4.45 | 126 | 70 | 4.8 | | | | | | | | | | |

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blog.exair.com @EXAIR

## 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

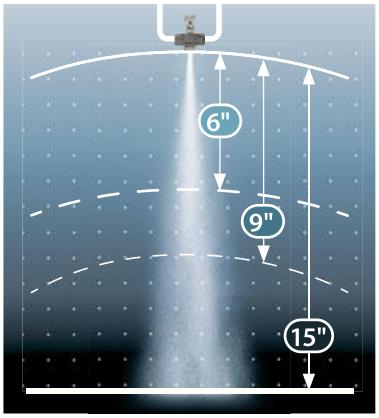
**Model: SR8040SS**
**Material:** Type 303 Stainless Steel

**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.

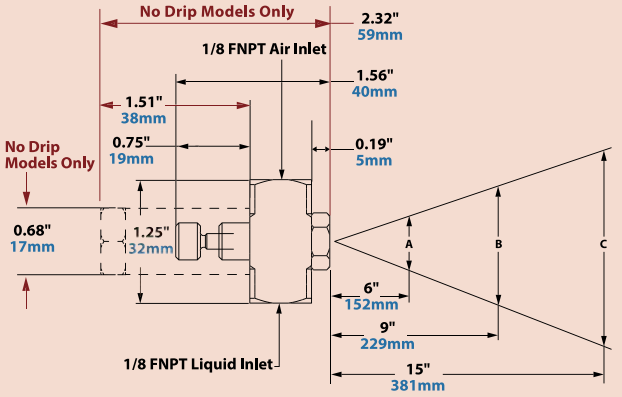
**Siphon or gravity fed for non-pressurized applications.**




**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 95.



**Liquid Flow in GPH/LPH**

| Model | Air | | | | Gravity Head | | | | | | Siphon Height | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Pressure PSI/BAR | | SCFM/ SLPM | | 18" | 46cm | 12" | 30cm | 6" | 15cm | 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 | | Width | | | | | | Max. Depth feet/m | |
|---|---|---|---|---|---|---|---|---|---|
| | | A | | B | | C | | | |
| Pressure PSI/BAR | | in | cm | in | cm | in | cm | | |
| 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 |
| 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 |

## Siphon Fed Flat Fan Pattern - 1/8 NPT

**Model: SF8010SS**
**Material:** Type 303 Stainless Steel

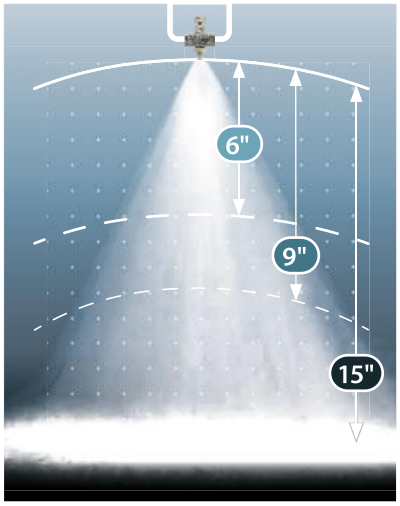
**Model: SF8020SS**
**Material:** Type 303 Stainless Steel

**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.

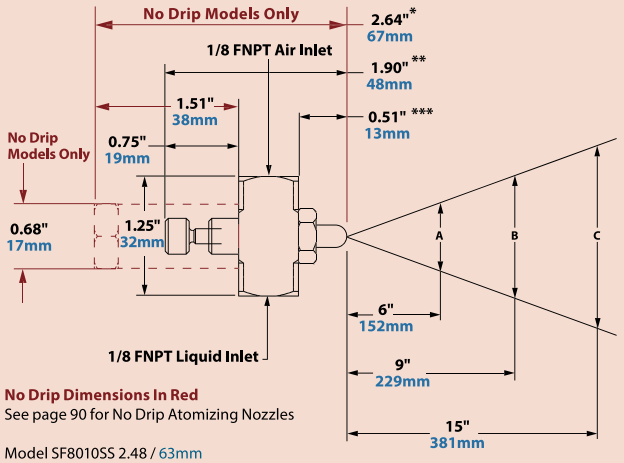
**Siphon or gravity fed for non-pressurized applications.**




**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 90 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 95.

**Liquid Flow in GPH/LPH**

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

**Spray Dimensions at 8" (20cm) Siphon Height**

| Air | | Width | | | | | | Max. Depth feet/m | |
|---|---|---|---|---|---|---|---|---|---|
| | | A | | B | | C | | | |
| Pressure PSI/BAR | | in | cm | in | cm | in | cm | | |
| 10 | 0.7 | 7 | 18 | 9 | 23 | 12 | 30 | 2 | 0.6 |
| 20 | 1.4 | 7 | 18 | 9 | 23 | 12 | 30 | 2 | 0.6 |
| 30 | 2.1 | 7 | 18 | 9 | 23 | 12 | 30 | 2 | 0.6 |
| 20 | 1.4 | 8 | 20 | 9 | 23 | 12 | 30 | 2 | 0.6 |
| 30 | 2.1 | 9 | 23 | 11 | 28 | 13 | 33 | 2 | 0.6 |
| 40 | 2.8 | 9 | 23 | 10 | 25 | 13 | 33 | 2 | 0.6 |
| 50 | 3.4 | 7 | 18 | 8 | 20 | 9 | 23 | 3 | 0.9 |
| 20 | 1.4 | 7 | 18 | 8 | 20 | 9.5 | 24 | 2 | 0.6 |
| 30 | 2.1 | 7 | 18 | 8 | 20 | 9.5 | 24 | 2 | 0.6 |
| 40 | 2.8 | 7 | 18 | 8 | 20 | 9.5 | 24 | 3 | 0.9 |
| 50 | 3.4 | 7 | 18 | 8 | 20 | 9.5 | 24 | 3 | 0.9 |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blog.exair.com @EXAIR

## Internal Mix Narrow Angle Round Pattern - 1/4 NPT

**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

### Model AN1010SS, AN1020SS, AN1030SS, and AN1040SS

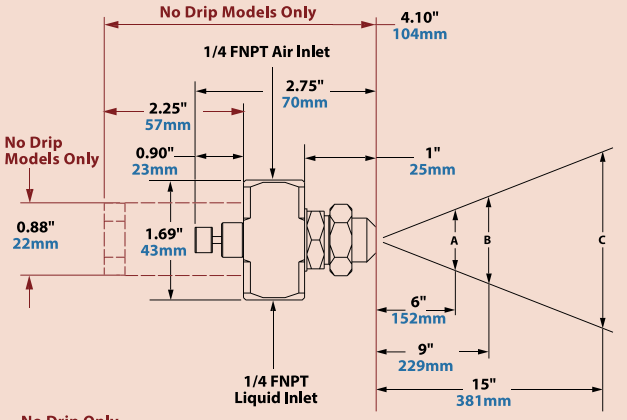
1/4 NPT internal mix narrow angle round pattern nozzles are excellent for spraying a concentrated mist of liquid. Because of the versatility of their adjustments, they can apply a heavy coat up close or send a very fine mist over 30 feet away! They are often used for precision application of lubricants 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.**

**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 90 for No Drip Atomizing Nozzles

For more information about droplet size and spray angle, see page 95.



| 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 feet/m |
| Air PSI/ BAR | | Liquid PSI/BAR | | A | | B | | C | | | | |
| | | | | in | cm | in | cm | in | cm | | | |
| 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 Nozzles



## Internal Mix Wide Angle Round Pattern - 1/4 NPT

**Model: AW1010SS**
**Material:** Type 303 Stainless Steel

**Model: AW1020SS**
**Material:** Type 303 Stainless Steel

**Model: AW1030SS**
**Material:** Type 303 Stainless Steel

**Model: AW1040SS**
**Material:** Type 303 Stainless Steel

### Model AW1010SS, AW1020SS, AW1030SS, and AW1040SS

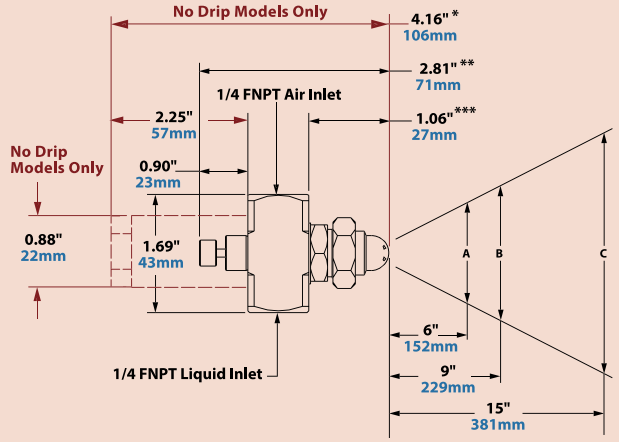
EXAIR's 1/4 NPT internal mix wide angle round pattern atomizing nozzles are great for covering a broad area. They can be adjusted for a light mist or a heavy soaking spray. They are popular for dust mitigation, humidification, and cooling of products, people or livestock in a broad area. These nozzles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

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

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

### Dimensions and Airflow Pattern

DOWNLOAD drawings at EXAIR.com




No Drip Only Dimensions in Red
See page 90 for No Drip Atomizing Nozzles

*Model AW2010SS: 4.03" / 102mm
**Model AW1010SS: 2.68" / 68mm
***Model AW1010SS: 0.93" / 24mm

For more information about droplet size and spray angle, see page 95.

| Model | 10 PSI/0.7 BAR Liquid | | | | | | 20 PSI/1.4 BAR Liquid | | | | | | 30 PSI/2.1 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 | |
| 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 |
| | 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 |
| | 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 |
| | 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 |
| 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 |
| | 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 |
| | --- | --- | --- | --- | --- | --- | 26 | 1.8 | 2.0 | 7.6 | 2.9 | 82 | 38 | 2.6 | 1.8 | 6.8 | 4.0 | 113 |
| | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 40 | 2.8 | 0.9 | 3.4 | 4.5 | 127 |
| 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 |
| | 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 |
| | 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 |
| | --- | --- | --- | --- | --- | --- | 26 | 1.8 | 2.6 | 9.8 | 2.7 | 76 | 40 | 2.8 | 1.4 | 5.3 | 4.3 | 122 |
| 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 |
| | 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 |
| | 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 |
| | 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 |

| Model | 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 | |
| AW1010SS | 30 | 2.1 | 3.0 | 11.4 | 0.7 | 20 | 44 | 3.0 | 3.5 | 13.2 | 0.9 | 25 |
| | 38 | 2.6 | 2.6 | 9.8 | 0.8 | 23 | 55 | 3.8 | 3.1 | 11.7 | 1.1 | 31 |
| | 46 | 3.2 | 2.1 | 7.9 | 1.0 | 28 | 65 | 4.5 | 2.5 | 9.5 | 1.3 | 37 |
| | 50 | 3.4 | 1.9 | 7.2 | 1.1 | 31 | 75 | 5.2 | 2.1 | 7.9 | 1.5 | 42 |
| AW1020SS | 38 | 2.6 | 6.4 | 24.2 | 2.9 | 82 | 54 | 3.7 | 8.5 | 32.2 | 3.5 | 99 |
| | 44 | 3.0 | 4.4 | 16.7 | 3.9 | 110 | 58 | 4.0 | 7.0 | 26.5 | 4.1 | 116 |
| | 48 | 3.3 | 2.6 | 9.8 | 4.6 | 130 | 65 | 4.5 | 5.4 | 20.4 | 5.2 | 147 |
| | 52 | 3.6 | 1.0 | 3.8 | 5.4 | 153 | 75 | 5.2 | 1.7 | 6.4 | 7.1 | 201 |
| AW1030SS | 40 | 2.8 | 10.0 | 37.9 | 2.6 | 74 | 56 | 3.9 | 15.0 | 56.8 | 2.9 | 82 |
| | 44 | 3.0 | 7.0 | 26.5 | 3.4 | 96 | 60 | 4.1 | 12.0 | 45.4 | 3.5 | 99 |
| | 48 | 3.3 | 3.7 | 14.0 | 4.2 | 119 | 70 | 4.8 | 5.0 | 18.9 | 5.6 | 159 |
| | 52 | 3.6 | 1.5 | 5.7 | 5.2 | 147 | 80 | 5.5 | 0.8 | 3.0 | 7.7 | 218 |
| AW1040SS | 60 | 4.1 | 19.3 | 73.1 | 10.3 | 292 | 85 | 5.9 | 24.0 | 91.0 | 13.8 | 391 |
| | 70 | 4.8 | 12.0 | 45.4 | 12.8 | 362 | 90 | 6.2 | 21.3 | 80.6 | 15.2 | 430 |
| | 80 | 5.5 | 6.5 | 24.6 | 14.7 | 416 | 95 | 6.6 | 18.5 | 70.0 | 16.5 | 467 |
| | 90 | 6.2 | 2.8 | 10.6 | 17.2 | 487 | 100 | 6.9 | 15.8 | 59.8 | 17.3 | 490 |

### Spray Dimensions

| Pressure | | | | Width | | | | | | Max. Depth feet/m | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Air PSI/ BAR | | Liquid PSI/BAR | | A | | B | | C | | | |
| | | | | in | cm | in | cm | in | cm | | |
| 10 | 0.7 | 10 | 0.7 | 7 | 18 | 9 | 23 | 14 | 36 | 5 | 1.5 |
| 20 | 1.4 | 20 | 1.4 | 9 | 23 | 11 | 28 | 15 | 38 | 6 | 1.8 |
| 34 | 2.3 | 30 | 2.1 | 10 | 25 | 12 | 30 | 16 | 41 | 8 | 2.4 |
| 42 | 2.9 | 40 | 2.8 | 10 | 25 | 12 | 30 | 16 | 41 | 9 | 2.7 |
| 60 | 4.1 | 60 | 4.1 | 10 | 25 | 12 | 30 | 16 | 41 | 12 | 3.7 |
| 12 | 0.8 | 10 | 0.7 | 10 | 25 | 13 | 33 | 17 | 43 | 9 | 2.7 |
| 24 | 1.7 | 20 | 1.4 | 11 | 28 | 13 | 33 | 18 | 46 | 11 | 3.4 |
| 34 | 2.3 | 30 | 2.1 | 11 | 28 | 13 | 33 | 18 | 46 | 12 | 3.7 |
| 46 | 3.2 | 40 | 2.8 | 11 | 28 | 14 | 36 | 18 | 46 | 14 | 4.3 |
| 60 | 4.1 | 60 | 4.1 | 11 | 28 | 14 | 36 | 19 | 48 | 16 | 4.9 |
| 12 | 0.8 | 10 | 0.7 | 10 | 25 | 13 | 33 | 18 | 46 | 9 | 2.7 |
| 22 | 1.5 | 20 | 1.4 | 11 | 28 | 13 | 33 | 18 | 46 | 11 | 3.4 |
| 34 | 2.3 | 30 | 2.1 | 11 | 28 | 14 | 36 | 18 | 46 | 13 | 4.0 |
| 46 | 3.2 | 40 | 2.8 | 11 | 28 | 14 | 36 | 19 | 48 | 15 | 4.6 |
| 65 | 4.5 | 60 | 4.1 | 11 | 28 | 14 | 36 | 20 | 51 | 19 | 5.8 |
| 28 | 1.9 | 10 | 0.7 | 10 | 25 | 14 | 36 | 16 | 41 | 16 | 4.9 |
| 46 | 3.2 | 20 | 1.4 | 11 | 28 | 14 | 36 | 18 | 46 | 18 | 5.5 |
| 60 | 4.1 | 30 | 2.1 | 12 | 30 | 16 | 41 | 21 | 53 | 21 | 6.4 |
| 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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## Internal Mix Flat Fan Pattern - 1/4 NPT

**Model: AF1010SS**
**Material:** Type 303 Stainless Steel

**Model: AF1020SS**
**Material:** Type 303 Stainless Steel

**Model: AF1030SS**
**Material:** Type 303 Stainless Steel

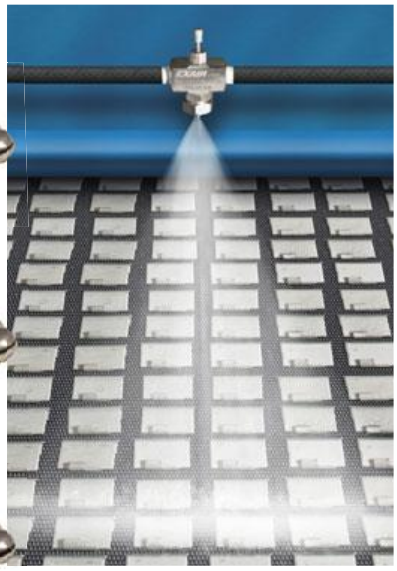
**Model: AF1040SS**
**Material:** Type 303 Stainless Steel

**Model: AF1050SS**
**Material:** Type 303 Stainless Steel

### Model AF1010SS, AF1020SS, AF1030SS, AF1040SS, and AF1050SS

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

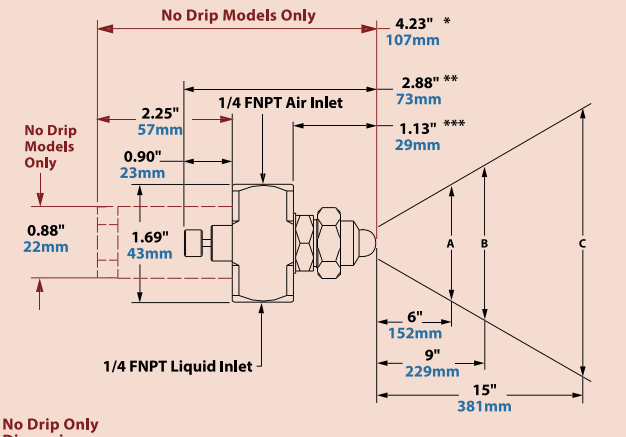
**For pressure fed applications not requiring independent air and liquid control.**



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

### Dimensions and Airflow Pattern

DOWNLOAD drawings at EXAIR.com




No Drip Only Dimensions in Red
See page 90 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 95.



| 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 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |
| AF1050SS | 14 | 1.0 | 8.8 | 33.3 | 3.0 | 85 | 26 | 1.8 | 11.5 | 43.5 | 4.3 | 122 | 34 | 2.3 | 20.8 | 78.7 | 4.6 | 130 | 42 | 2.9 | 30.0 | 114 | 4.8 | 136 | 58 | 4.0 | 42.0 | 159 | 5.5 | 156 |
| | 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

| Pressure: Air PSI/BAR | | 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 Nozzles



## Internal Mix Deflected Flat Fan Pattern - 1/4 NPT

**Model: AD1010SS**
**Material:** Type 303 Stainless Steel

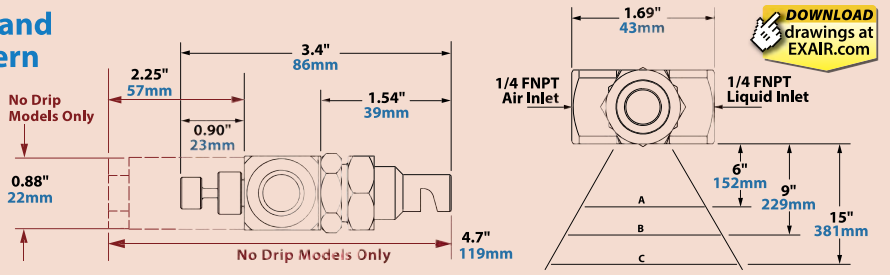
A Model AD1010SS is used to apply a protective coating to wood panels.

### 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



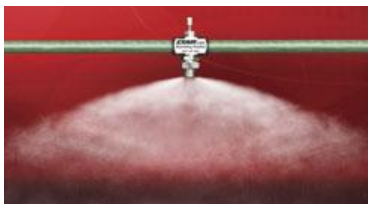

| Model | 10 PSI/0.7 BAR Liquid | | | | | | 20 PSI/1.4 BAR Liquid | | | | | | 30 PSI/2.1 BAR Liquid | | | | | | 40 PSI/2.8 BAR Liquid | | | | | | 60 PSI/4.1 BAR Liquid | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 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 | |
| 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 |
| | 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 |
| | 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 |
| | 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 |

**Spray Dimensions**

| Pressure | | | | Width | | | | | | Max. Depth in/cm | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Air PSI/BAR | | Liquid PSI/BAR | | A | | B | | C | | | |
| | | | | in | cm | in | cm | in | cm | | |
| 12 | 0.8 | 10 | 0.7 | 9 | 23 | 14 | 36 | 16 | 41 | 36 | 91 |
| 22 | 1.5 | 20 | 1.4 | 11 | 28 | 13 | 33 | 16 | 41 | 42 | 107 |
| 34 | 2.3 | 30 | 2.1 | 8 | 20 | 12 | 30 | 16 | 41 | 45 | 114 |
| 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



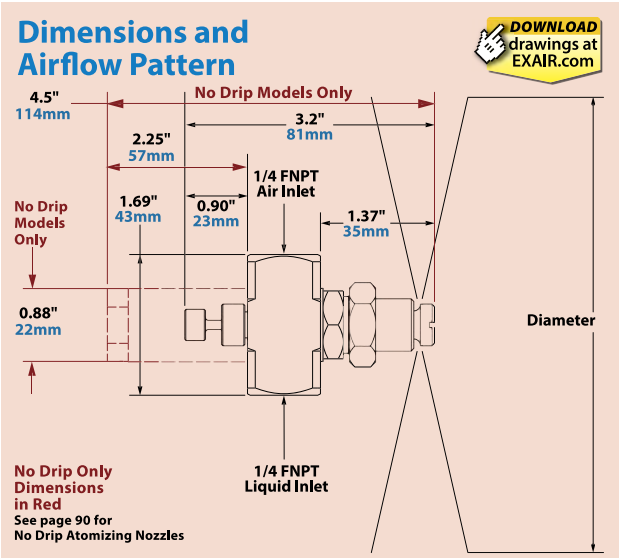
This 360° circular pattern nozzle can be used to coat inside diameters or cover a broad area of over 4' (1219mm).

### 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 95.

| 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 | |
| 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 |
| | 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 |
| | 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 |
| | 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 |

**Spray Dimensions**

| Pressure | | | | Diameter | |
|---|---|---|---|---|---|
| Air PSI/BAR | | Liquid PSI/BAR | | | |
| | | | | in | cm |
| 20 | 1.4 | 10 | 0.7 | 36 | 91 |
| 34 | 2.3 | 20 | 1.4 | 39 | 99 |
| 50 | 3.4 | 30 | 2.1 | 44 | 112 |
| 60 | 4.1 | 40 | 2.8 | 49 | 124 |
| 85 | 5.9 | 60 | 4.1 | 53 | 135 |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## 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

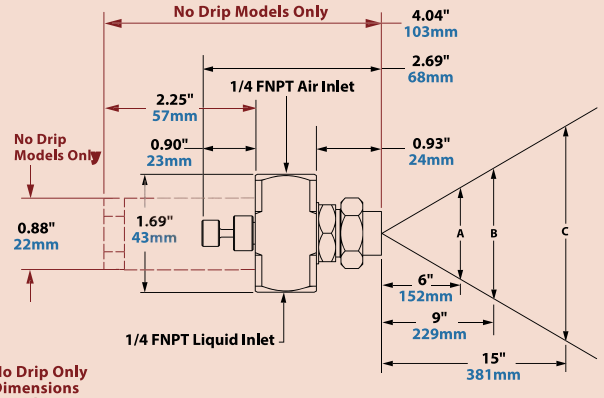
1/4 NPT external mix round pattern nozzles are great where a high volume of liquid is needed over a specific area or general area, but not in a flat pattern. Applications include spot treatments of parts, covering irregularly shaped objects or covering a container of parts with a heavy coat. They are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




**No Drip Only Dimensions in Red**
See page 90 for No Drip Atomizing Nozzles

For more information about droplet size and spray angle, see page 95.



| 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 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 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 | |
| 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 |
| | 30 | 2.1 | | | 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 |
| | 50 | 3.4 | | | 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 | | | | Width | | | | | | | | Max. Depth feet/m |
| Air PSI/BAR | | Liquid PSI/BAR | | A | | B | | C | | | | |
| | | | | in | cm | in | cm | in | cm | | | |
| 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 |
| 40 | 2.8 | 20 | 1.4 | 3.5 | 8.9 | 5.0 | 12.7 | 7.0 | 17.8 | 14 | 4.3 |
| 60 | 4.1 | 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 |
| 40 | 2.8 | 20 | 1.4 | 4.5 | 11.4 | 6.0 | 15.2 | 8.3 | 21.1 | 15 | 4.6 |
| 60 | 4.1 | 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.

## 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

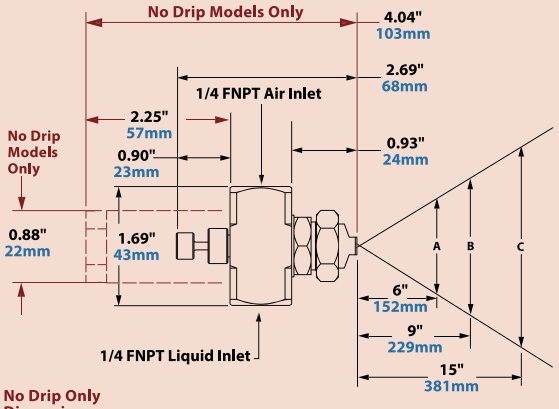
1/4 NPT external mix narrow angle flat fan pattern nozzles are great where a high volume of liquid is needed over a concentrated area. Since they are external mix, airflow and liquid flow can be controlled independently. External mix narrow angle flat fan pattern nozzles are the best choice where thicker 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 90 for No Drip Atomizing Nozzles

For more information about droplet size and spray angle, see page 95.

| 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 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 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 | |
| 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 |
| | 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 |
| | 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 |
| | 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 |
| 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 |
| | 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 | | | 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 |
| | 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 |
| 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 |
| | 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 |
| | 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 |
| | 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 |
| 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 |
| | 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 |
| | 40 | 2.8 | | | 8.4 | 238 | 50 | 3.4 | | | 10.0 | 283 | 60 | 4.1 | | | 11.5 | 326 | 70 | 4.8 | | | 12.7 | 360 | 80 | 5.5 | | | 13.7 | 388 |
| | 50 | 3.4 | | | 10.0 | 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 |

| Spray Dimensions | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pressure | | | | Width | | | | | | | | Max. Depth feet/m | |
| Air PSI/ BAR | | Liquid PSI/ BAR | | A | | B | | C | | | | | |
| | | | | in | cm | in | cm | in | cm | | | | |
| 5 | 0.3 | 3 | 0.2 | 4.0 | 10.2 | 5.8 | 14.7 | 9.5 | 24.1 | 6 | 1.8 | | |
| 25 | 1.7 | 5 | 0.3 | 5.5 | 14.0 | 8.0 | 20.3 | 10.0 | 25.4 | 12 | 3.7 | | |
| 25 | 1.7 | 20 | 1.4 | 6.5 | 16.5 | 9.5 | 24.1 | 13.0 | 33.0 | 13 | 4.0 | | |
| 50 | 3.4 | 20 | 1.4 | 6.3 | 16.0 | 9.3 | 23.6 | 12.0 | 30.5 | 16 | 4.9 | | |
| 75 | 5.2 | 40 | 2.8 | 6.5 | 16.5 | 9.5 | 24.1 | 13.0 | 33.0 | 18 | 5.5 | | |
| 10 | 0.7 | 3 | 0.2 | 4.5 | 11.4 | 7.0 | 17.8 | 11.0 | 27.9 | 9 | 2.7 | | |
| 30 | 2.1 | 5 | 0.3 | 6.0 | 15.2 | 10.0 | 25.4 | 14.0 | 35.6 | 14 | 4.3 | | |
| 35 | 2.4 | 20 | 1.4 | 6.5 | 16.5 | 11.0 | 27.9 | 16.0 | 40.6 | 17 | 5.2 | | |
| 60 | 4.1 | 20 | 1.4 | 7.5 | 19.1 | 11.5 | 29.2 | 18.0 | 45.7 | 20 | 6.1 | | |
| 75 | 5.2 | 40 | 2.8 | 7.5 | 19.1 | 12.0 | 30.5 | 17.0 | 43.2 | 22 | 6.7 | | |
| 10 | 0.7 | 3 | 0.2 | 6.0 | 15.2 | 9.0 | 22.9 | 12.0 | 30.5 | 12 | 3.7 | | |
| 35 | 2.4 | 5 | 0.3 | 6.8 | 17.3 | 9.0 | 22.9 | 12.0 | 30.5 | 20 | 6.1 | | |
| 40 | 2.8 | 10 | 0.7 | 7.0 | 17.8 | 10.0 | 25.4 | 13.0 | 33.0 | 23 | 7.0 | | |
| 60 | 4.1 | 20 | 1.4 | 7.0 | 17.8 | 11.0 | 27.9 | 14.0 | 35.6 | 28 | 8.5 | | |
| 75 | 5.2 | 40 | 2.8 | 7.0 | 17.8 | 11.0 | 27.9 | 14.0 | 35.6 | 30 | 9.1 | | |
| 15 | 1.0 | 3 | 0.2 | 6.0 | 15.2 | 10.0 | 25.4 | 14.0 | 35.6 | 13 | 4.0 | | |
| 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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## External Mix Wide Angle Flat Fan Pattern - 1/4 NPT

**Model: EB1010SS**
**Material:** Type 303 Stainless Steel

**Model: EB1020SS**
**Material:** Type 303 Stainless Steel

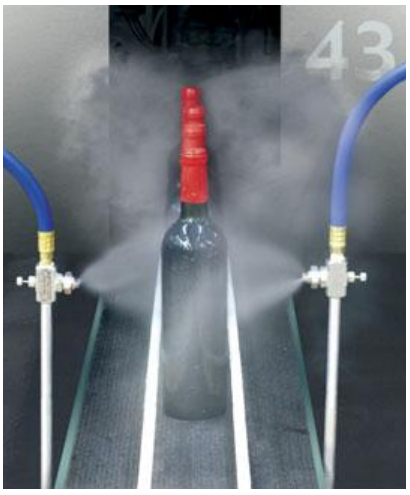
**Model: EB1030SS**
**Material:** Type 303 Stainless Steel

**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.

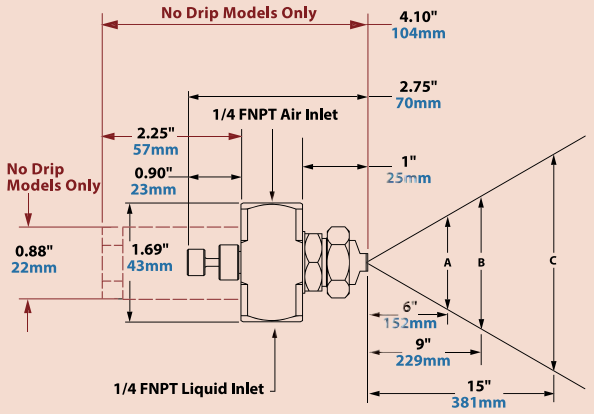
**For pressure fed applications with independent air and liquid control.**



**(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 90 for No Drip Atomizing Nozzles

For more information about droplet size and spray angle, see page 95.



| 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 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 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 |
| 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 |
| | 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 |
| | 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 |
| | 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 |
| 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 |
| | 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 |
| | 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 |
| | 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 |
| 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 | | | 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 |
| | 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 |
| | 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 |
| 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 |
| | 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 |
| | 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 |
| | 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 |

| Spray Dimensions | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Pressure | | | | Width | | | | | | Max. Depth feet/m | |
| Air PSI/ BAR | | Liquid PSI/ BAR | | A | | B | | C | | | |
| | | | | in | cm | in | cm | in | cm | | |
| 10 | 0.7 | 5 | 0.3 | 8.0 | 20.3 | 11.0 | 27.9 | 14.0 | 35.6 | 9 | 2.7 |
| 15 | 1.0 | 10 | 0.7 | 9.0 | 22.9 | 12.0 | 30.5 | 17.0 | 43.2 | 11 | 3.4 |
| 20 | 1.4 | 20 | 1.4 | 9.3 | 23.6 | 14.0 | 35.6 | 19.0 | 48.3 | 11 | 3.4 |
| 25 | 1.7 | 30 | 2.1 | 11.0 | 27.9 | 15.0 | 38.1 | 20.0 | 50.8 | 13 | 4.0 |
| 25 | 1.7 | 40 | 2.8 | 11.0 | 27.9 | 15.0 | 38.1 | 21.0 | 53.3 | 14 | 4.3 |
| 8 | 0.6 | 5 | 0.3 | 11.0 | 27.9 | 16.0 | 40.6 | 19.0 | 48.3 | 8 | 2.4 |
| 15 | 1.0 | 20 | 1.4 | 11.0 | 27.9 | 16.0 | 40.6 | 21.0 | 53.3 | 11 | 3.4 |
| 20 | 1.4 | 20 | 1.4 | 12.0 | 30.5 | 17.0 | 43.2 | 22.0 | 55.9 | 12 | 3.7 |
| 25 | 1.7 | 30 | 2.1 | 13.0 | 33.0 | 18.0 | 45.7 | 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 |
| 15 | 1.0 | 3 | 0.2 | 11.0 | 27.9 | 17.0 | 43.2 | 21.0 | 53.3 | 13 | 4.0 |
| 25 | 1.7 | 10 | 0.7 | 12.0 | 30.5 | 18.0 | 45.7 | 23.0 | 58.4 | 16 | 4.9 |
| 45 | 3.1 | 20 | 1.4 | 13.0 | 33.0 | 19.0 | 48.3 | 24.0 | 61.0 | 21 | 6.4 |
| 60 | 4.1 | 30 | 2.1 | 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 |
| 30 | 2.1 | 5 | 0.3 | 13.0 | 33.0 | 19.0 | 48.3 | 24.0 | 61.0 | 17 | 5.2 |
| 45 | 3.1 | 20 | 1.4 | 14.0 | 35.6 | 20.0 | 50.8 | 26.0 | 66.0 | 19 | 5.8 |
| 65 | 4.5 | 20 | 1.4 | 15.0 | 38.1 | 21.0 | 53.3 | 27.0 | 68.6 | 23 | 7.0 |
| 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 |

## Siphon Fed Round Pattern - 1/4 NPT

**Model: SR1010SS**
**Material:** Type 303 Stainless Steel

**Model: SR1020SS**
**Material:** Type 303 Stainless Steel

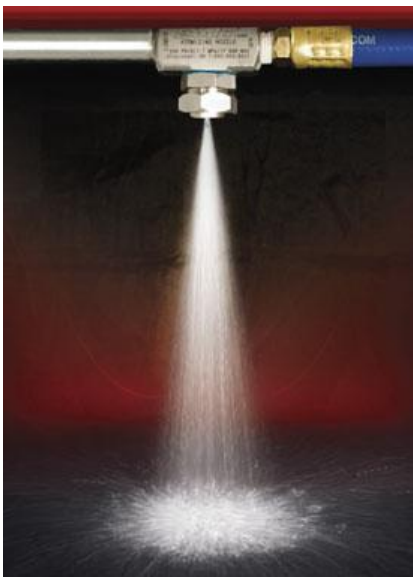
**Model: SR1030SS**
**Material:** Type 303 Stainless Steel

**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.

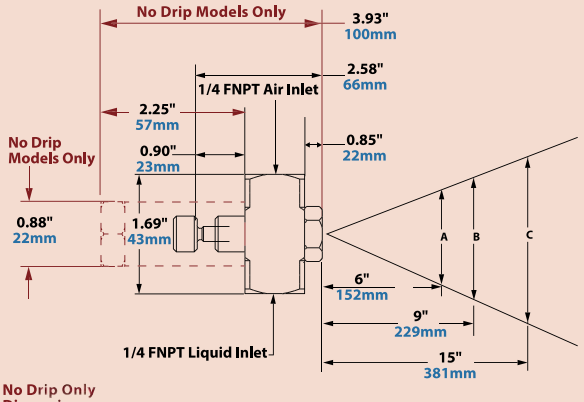
**Siphon or gravity fed for non-pressurized applications.**



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

### Dimensions and Airflow Pattern

DOWNLOAD drawings at EXAIR.com




No Drip Only Dimensions in Red
See page 90 for No Drip Atomizing Nozzles

For more information about droplet size and spray angle, see page 95.

### 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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## 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

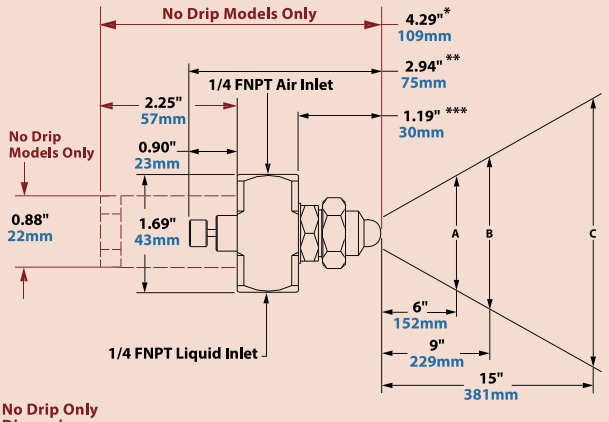
1/4 NPT siphon fed flat fan pattern nozzles are great where no liquid pressure is available and a thin coating is needed over a wide band. Flow rate is adjustable via the adjusting valve. Siphon nozzles work best with a suction height of 36" (914mm) or less. Since these nozzles are siphon fed, the compressed 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 90 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 95.



**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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |
| | 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 |
| | 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 | --- | --- | --- | --- | --- | --- |
| 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 |
| | 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 |
| | 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 |
| | 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 | --- | --- | --- | --- |
| 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 |
| | 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 |
| | 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 |
| | 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 |

**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 | 9 | 23 | 11 | 28 | 13 | 33 | 5 | 1.5 |
| 20 | 1.4 | 10 | 25 | 12 | 30 | 14 | 36 | 6 | 1.8 |
| 30 | 2.1 | 11 | 28 | 13 | 33 | 15 | 38 | 7 | 2.1 |
| 20 | 1.4 | 10 | 25 | 14 | 36 | 19 | 48 | 6 | 1.8 |
| 30 | 2.1 | 11 | 28 | 15 | 38 | 21 | 53 | 7 | 2.1 |
| 40 | 2.8 | 13 | 33 | 16 | 41 | 23 | 58 | 6 | 1.8 |
| 50 | 3.4 | 14 | 36 | 18 | 46 | 25 | 64 | 6 | 1.8 |
| 20 | 1.4 | 9 | 23 | 11 | 28 | 15 | 38 | 8 | 2.4 |
| 30 | 2.1 | 10 | 25 | 13 | 33 | 17 | 43 | 9 | 2.7 |
| 40 | 2.8 | 11 | 28 | 14 | 36 | 17 | 43 | 10 | 3.0 |
| 50 | 3.4 | 11 | 28 | 14 | 36 | 18 | 46 | 11 | 3.4 |

## 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.

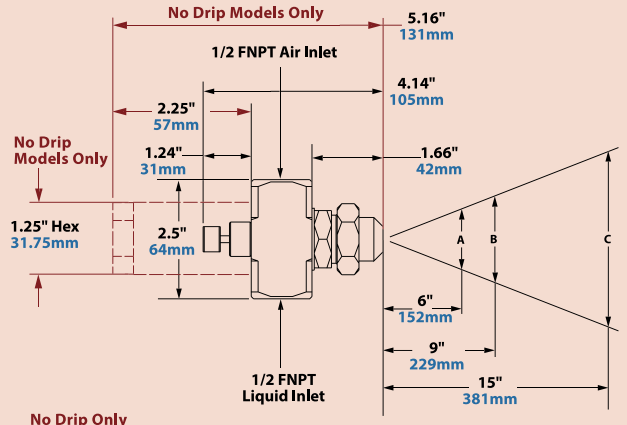
**For pressure fed applications not requiring independent air and liquid control.**

**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 95.

### Dimensions and Airflow Pattern

DOWNLOAD drawings at EXAIR.com




No Drip Only Dimensions in Red
See page 90 for No Drip Atomizing Nozzles

For more information about droplet size and spray angle, see page 95.

**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 | | | | | | 15 PSI/1.0 BAR Liquid | | | | | | 25 PSI/1.7 BAR Liquid | | | | | | 35 PSI/2.4 BAR Liquid | | | | | | 55 PSI/3.8 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 | |
| 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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## 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

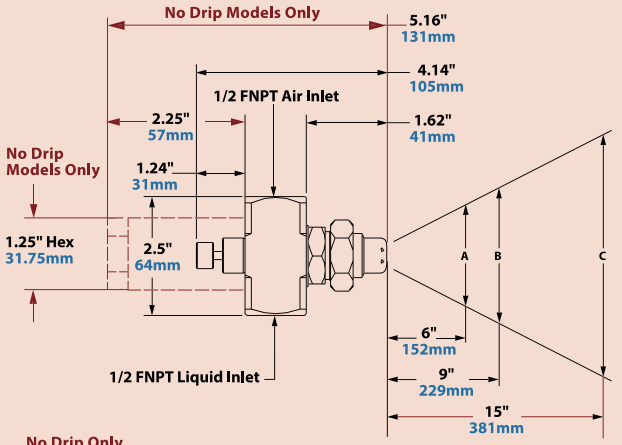
EXAIR's 1/2 NPT internal mix wide angle round pattern atomizing nozzles are great for covering a broad area. These larger atomizing nozzles can be adjusted for a light mist or a heavy soaking spray. They are popular for dust mitigation, humidification, and cooling of products, people or livestock in 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

DOWNLOAD drawings at EXAIR.com




No Drip Only Dimensions in Red
See page 90 for No Drip Atomizing Nozzles

For more information about droplet size and spray angle, see page 95.



| 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 | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 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 | |
| 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 | 15.15 | 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 |

## 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

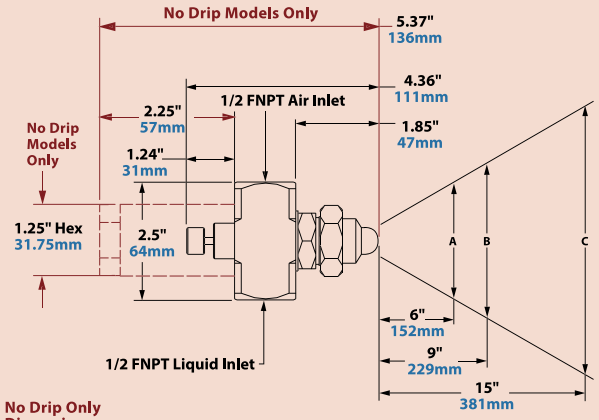
1/2 NPT internal mix flat fan pattern atomizing nozzles are designed with efficiency in mind. Especially good for vertical or horizontal assembly lines, the broad thin pattern of these larger atomizing nozzles makes efficient use of your expensive liquids. Their output can be adjusted for a very light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

DOWNLOAD drawings at EXAIR.com




No Drip Only Dimensions in Red
See page 90 for No Drip Atomizing Nozzles

For more information about droplet size and spray angle, see page 95.

### 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 |

### 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.

| 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 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AF5010SS | --- | --- | --- | --- | --- | --- | 28 | 1.9 | 33.6 | 127 | 23.4 | 663 |
| | --- | --- | --- | --- | --- | --- | 30 | 2.1 | 25.2 | 95 | 25.3 | 716 |
| | --- | --- | --- | --- | --- | --- | 34 | 2.3 | 12.6 | 48 | 28.7 | 813 |
| | --- | --- | --- | --- | --- | --- | 36 | 2.5 | 11.5 | 44 | 31.2 | 884 |
| AF5020SS | 10 | 0.69 | 18 | 68 | 18.0 | 510 | 18 | 1.2 | 87.6 | 332 | 15.6 | 442 |
| | 12 | 0.83 | 6 | 23 | 6.0 | 170 | 20 | 1.4 | 62.4 | 236 | 18.4 | 521 |
| | --- | --- | --- | --- | --- | --- | 22 | 1.5 | 45.6 | 173 | 20.6 | 583 |
| | --- | --- | --- | --- | --- | --- | 24 | 1.7 | 30.6 | 116 | 23.3 | 660 |

| Model | 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 | 44 | 3.0 | 38.4 | 145 | 32.4 | 918 | 58 | 4.0 | 46.2 | 175 | 40.3 | 1141 | --- | --- | --- | --- | --- | --- |
| | 48 | 3.3 | 35.8 | 136 | 36.2 | 1025 | 62 | 4.3 | 34.8 | 132 | 43.5 | 1232 | --- | --- | --- | --- | --- | --- |
| | 50 | 3.4 | 18 | 68 | 38.0 | 1076 | 65 | 4.5 | 25.2 | 95 | 46.0 | 1303 | --- | --- | --- | --- | --- | --- |
| | 60 | 4.1 | 3.5 | 13 | 46.0 | 1303 | 70 | 4.8 | 16.2 | 61 | 49.7 | 1408 | --- | --- | --- | --- | --- | --- |
| AF5020SS | 26 | 1.8 | 150 | 568 | 17.9 | 507 | 36 | 2.5 | 177 | 670 | 22.3 | 632 | 54 | 3.7 | 231 | 874 | 29.3 | 830 |
| | 30 | 2.1 | 99 | 375 | 22.3 | 632 | 40 | 2.8 | 132 | 500 | 26.6 | 753 | 60 | 4.1 | 186 | 704 | 35.6 | 1008 |
| | 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 |
| | 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

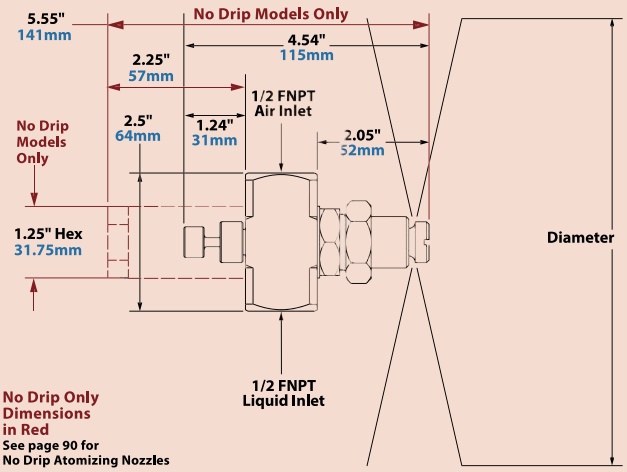
### Model AT5010SS

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.**

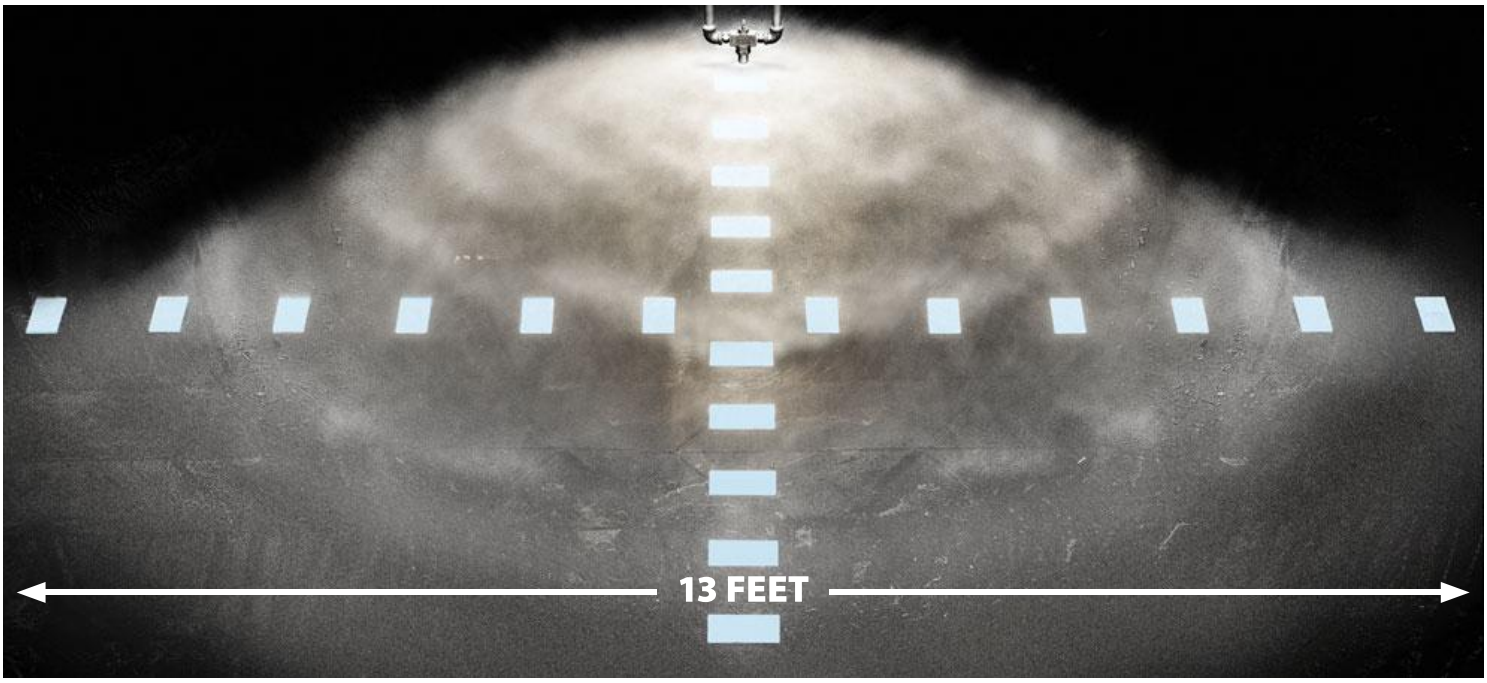
### Dimensions and Airflow Pattern

DOWNLOAD drawings at EXAIR.com




For more information about droplet size and spray angle, see page 95.






**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 Air PSI/BAR | Pressure Liquid PSI/BAR | Diameter in | Diameter 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 |

## 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.**

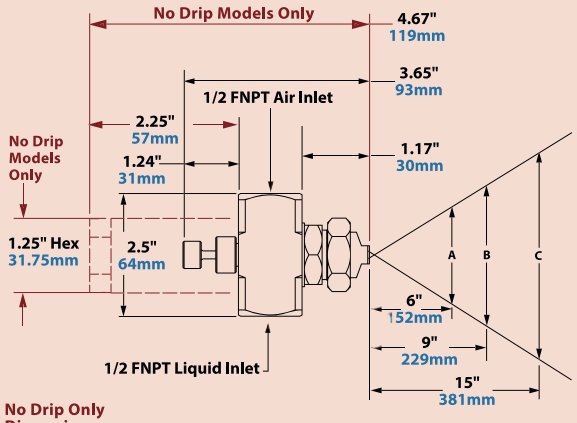
External mix narrow angle flat fan nozzles provide a high volume of liquid in a concentrated area.



See page 4 for complete details.

### Dimensions and Airflow Pattern

DOWNLOAD drawings at EXAIR.com




No Drip Only Dimensions in Red

See page 90 for No Drip Atomizing Nozzles

For more information about droplet size and spray angle, see page 95.

| 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 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 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 |
| EF5010SS | 30 | 2.1 | 141 534 | 30.2 854 | 40 | 2.8 | 186 704 | 36.6 1037 | 45 | 3.1 | 218 825 | 39.9 1130 | 55 | 3.8 | 264 999 | 46.4 1314 | 80 | 5.5 | 303 1147 | 56.0 1586 |
| | 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 |
| | 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 |
| | 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 |

| Spray Dimensions | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Pressure | | | | Width | | | | | | Max. Depth feet/m | |
| Air PSI/BAR | | Liquid PSI/BAR | | A | | B | | C | | | |
| | | | | in | cm | in | cm | in | cm | | |
| 35 | 2.4 | 3 | 0.2 | 15 | 38 | 18.5 | 47 | 22 | 56 | 25 | 7.6 |
| 50 | 3.4 | 5 | 0.3 | 15 | 38 | 19 | 48 | 23 | 58 | 31 | 9.4 |
| 70 | 4.8 | 10 | 0.7 | 15 | 38 | 20 | 51 | 25 | 64 | 33 | 10.1 |
| 90 | 6.2 | 15 | 1.0 | 15 | 38 | 20 | 51 | 25 | 64 | 35 | 10.7 |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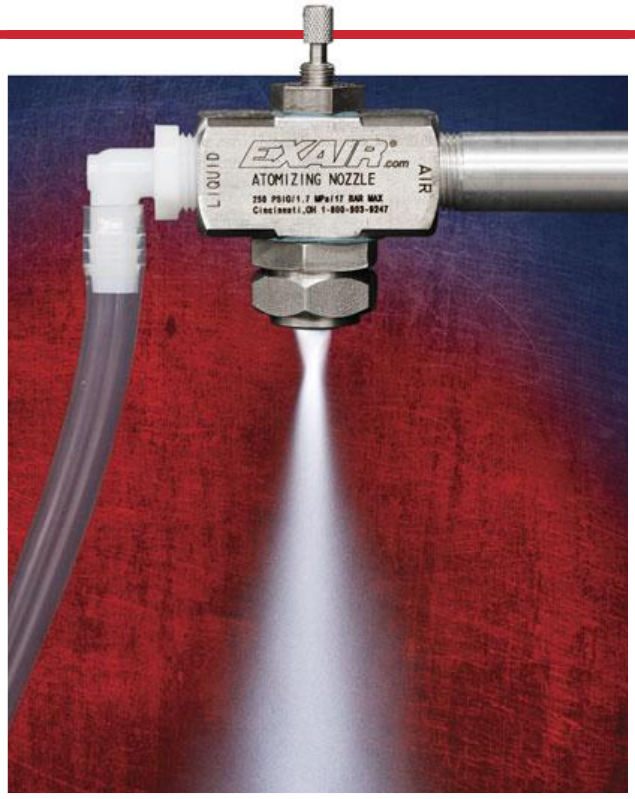
## Siphon Fed Round Pattern - 1/2 NPT

**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.**

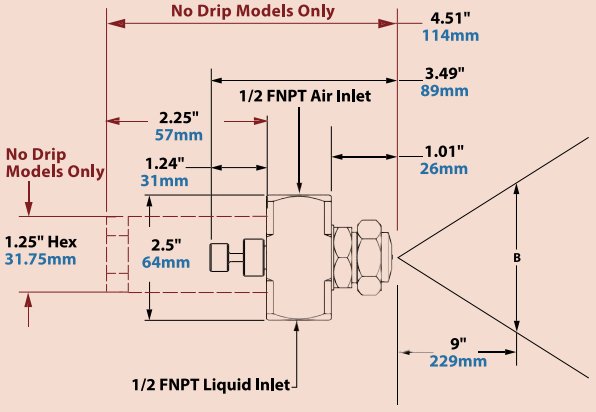


## Air and Liquid Caps are Interchangeable!

**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 90 for No Drip Atomizing Nozzles**

For more information about droplet size and spray angle, see page 95.

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

# No Drip 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.

Built to Last 5 yr. WARRANTY
See page 4 for complete details.

**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

**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 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 |

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

2013 Plant Engineering PRODUCT of the YEAR Gold Award

NO DRIP EXTERNAL MIX ATOMIZING NOZZLES

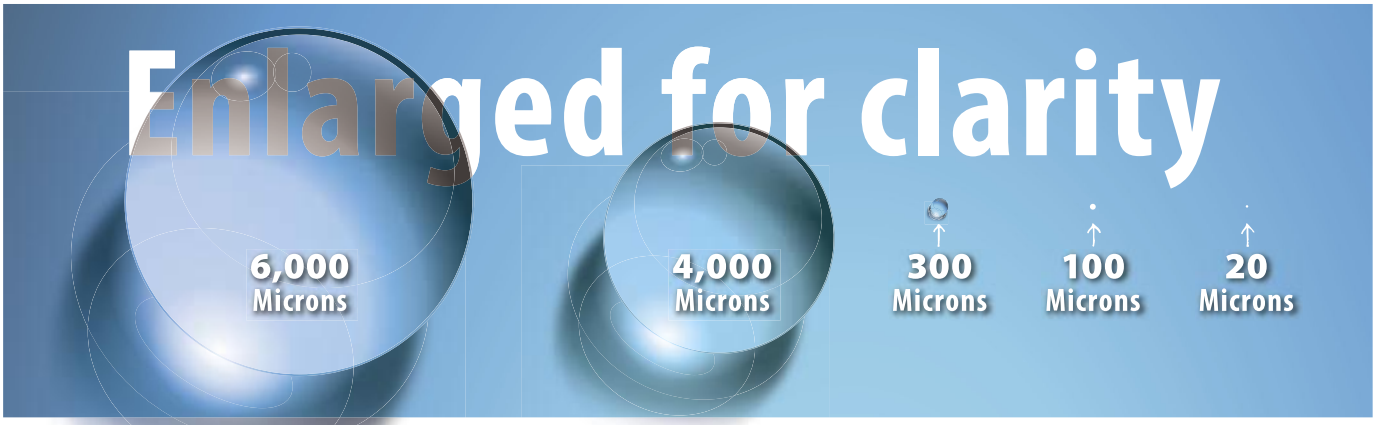
| Model | Description |
|---|---|
| **No Drip External Mix Round Pattern Atomizing Nozzles** | |
| ER2010SS | No Drip External Mix Round Pattern Atomizing Nozzles, 3.8 GPH/14.4 LPH Max, 1/4 NPT |
| ER2020SS | No Drip External Mix Round Pattern Atomizing Nozzles, 7.5 GPH/28.4 LPH Max, 1/4 NPT |
| ER2030SS | 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 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).

Built to Last 5 yr. WARRANTY

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


For Technical Assistance, Call An EXAIR Application Engineer 1-800-903-9247
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blog.exair.com @EXAIR

## FullStream™ Cone Nozzles - 1/4 NPT

**Model: FL1008SS**
**Material:** Type 303 Stainless Steel

**Model: FL1010SS**
**Material:** Type 303 Stainless Steel

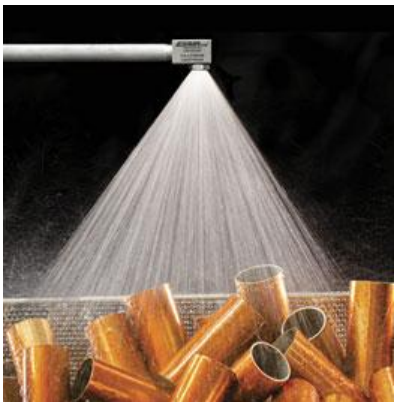
**Model: FL1011SS**
**Material:** Type 303 Stainless Steel

### 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 PSIG liquid pressure. FullStream nozzles work well with liquids containing particulate.

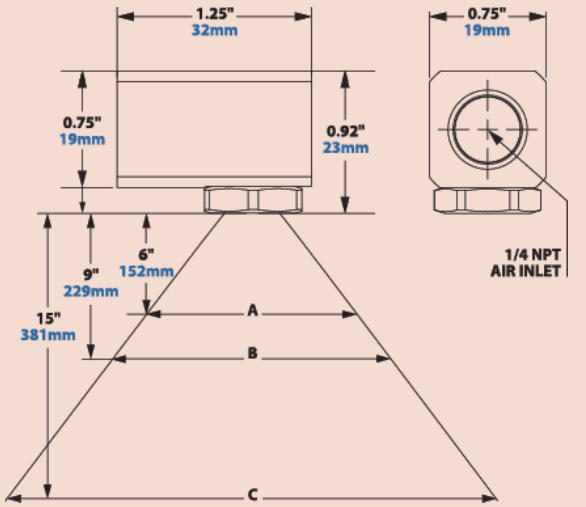
Compared to EXAIR's Air Atomizing nozzles the FullStream will have higher liquid flow rates.

For maximum liquid conservation and spray control visit page 68.

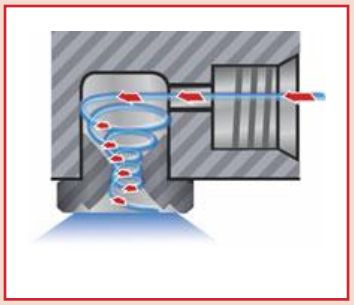


### Dimensions and Airflow Pattern

DOWNLOAD drawings at EXAIR.com




### How the FullStream Cone Nozzle Works



With FullStream 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**

| 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 | FL1008SS | 8 | 0.109" | GPM | 0.50 | 0.60 | 0.70 | 0.80 | 1.15 | 1.55 | 1.80 |
| | | | | LPM | 1.89 | 2.27 | 2.65 | 3.03 | 4.35 | 5.87 | 6.81 |
| | FL1010SS | 10 | 0.125" | GPM | 0.48 | 0.67 | 0.83 | 1.00 | 1.34 | 1.88 | 2.36 |
| | | | | LPM | 1.82 | 2.54 | 3.14 | 3.79 | 5.07 | 7.12 | 8.93 |
| | FL1011SS | 11 | 0.144" | GPM | 0.62 | 0.85 | 0.96 | 1.10 | 1.51 | 2.21 | 2.66 |
| | | | | LPM | 2.35 | 3.22 | 3.63 | 4.16 | 5.72 | 8.36 | 10.07 |

**Spray Angle**

| Inlet Pressure PSI | Inlet BAR | Width A in | A cm | B in | B cm | C in | C cm |
|---|---|---|---|---|---|---|---|
| 7 | 0.5 | 5.7 | 14 | 8.6 | 22 | 14.3 | 36 |
| 20 | 1.4 | 7.4 | 19 | 11.0 | 28 | 18.4 | 47 |
| 60 | 4.1 | 8.4 | 21 | 12.6 | 32 | 21.0 | 53 |
| 7 | 0.5 | 6.8 | 17 | 10.2 | 26 | 17.0 | 43 |
| 20 | 1.4 | 8.7 | 22 | 13.1 | 33 | 21.8 | 55 |
| 60 | 4.1 | 10.1 | 26 | 15.1 | 38 | 25.2 | 64 |
| 7 | 0.5 | 6.8 | 17 | 10.2 | 26 | 17.0 | 43 |
| 20 | 1.4 | 8.7 | 22 | 13.1 | 33 | 21.8 | 55 |
| 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

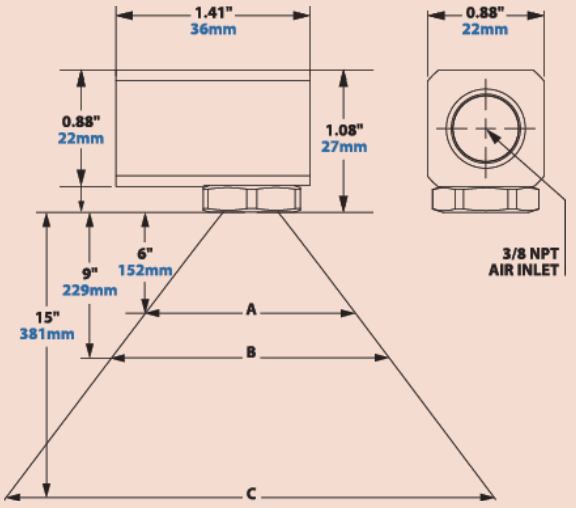
**Model: FL3029SS**
**Material:** Type 303 Stainless Steel

### 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 PSIG liquid pressure. FullStream nozzles work well with liquids containing particulate.

### Dimensions and Airflow Pattern

DOWNLOAD drawings at EXAIR.com




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

For maximum liquid conservation and spray control visit page 68.

See page 95-2 for How the FullStream Cone Nozzle Works.

**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 |