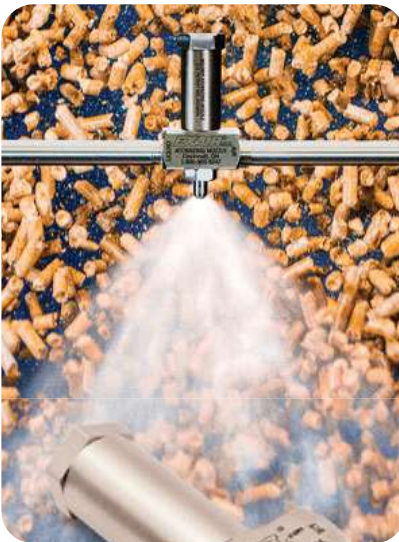




No Drip Air Atomizing Spray Nozzles

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

Spray Nozzles

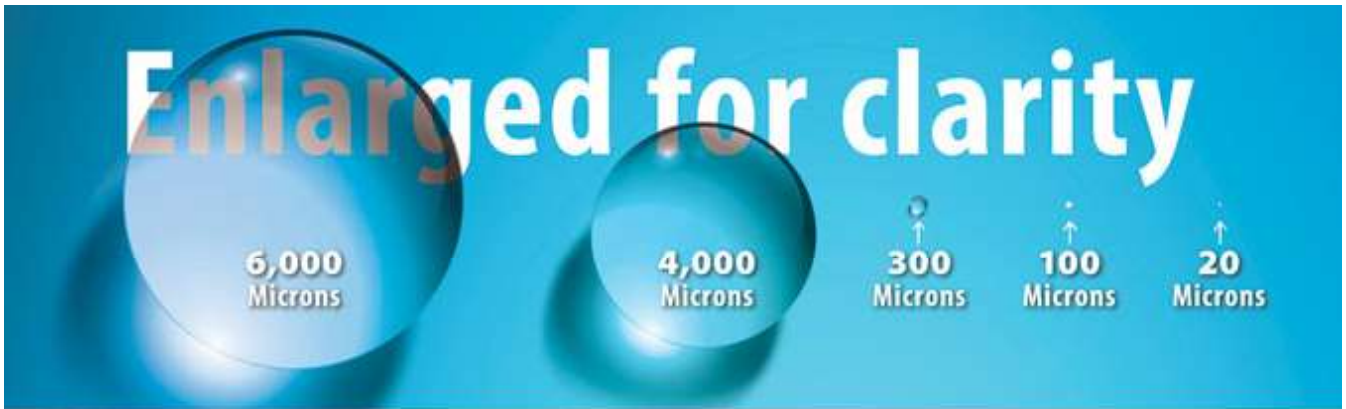


Model	Description
No Drip Siphon Fed Round Pattern Atomizing Nozzles	
SR9010SS	No Drip Siphon Fed Round Pattern Atomizing Nozzles, 0.53 GPH/2.02 LPH Max, 1/8 NPT
SR9020SS	No Drip Siphon Fed Round Pattern Atomizing Nozzles, 0.96 GPH/3.63 LPH Max, 1/8 NPT
SR9030SS	No Drip Siphon Fed Round Pattern Atomizing 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

NO DRIP SIPHON FED ATOMIZING NOZZLES



Air Atomizing Spray Nozzles



Droplet Size

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

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

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

* Volume Median Diameter $D_v(50.0)$ of liquid droplets.
1 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°