

EXAIR®

MANUFACTURING INTELLIGENT COMPRESSED AIR PRODUCTS SINCE 1983



COAT



CLEAN



COOL



CONSERVE



CONVEY

36 CATALOG

BETE®
PERFORMANCE SPRAY ENGINEERING
DIVISION OF EXAIR

MF MicroWhirl Misting & Fogging Nozzles	pg 107
NF Standard Fan Nozzles	pg 108
TF Full Cone Spray Nozzles	pg 109
MP MaxiPass Maximum Free Passage Nozzles	pg 110
WL Full Cone Nozzles	pg 111
HC HydroClaw & TW Spiral Tank Washing Nozzles ...	pg 112
HWS2 HydroWhirl Stinger & HWM HydroWhirl Mini	pg 113
HWP HydroWhirl Poseidon & HWD HydroWhirl Disc	pg 114



YOU REQUESTED THIS CATALOG AND PRICE LIST.
PLEASE SEE MAILING LABEL ON BACK COVER.

Stay up to date by visiting our website and take advantage of the information and services we didn't have room to display in this catalog.



Where you can

- Chat live with our problem solving, technical expert Application Engineers
- Watch product videos to learn more about the features and benefits of our engineered products
- Quickly order online with a purchase order or credit card (US & Canada)
- Access product presentation slides you can use to educate others
- Find International Distributors all across the world



Access our Knowledge Base in "Resources"

- Download 3D models and CAD drawings in multiple formats to place into your drawings
- Calculate air savings and ROI to see how quickly EXAIR products will pay off
- Search our Case Study Library & Applications database and become familiar with how our products solve problems
- Use our product FAQ's for quick access to our most common questions
- Learn about our free Efficiency Lab service and use it to determine air and money savings you can achieve when installing EXAIR engineered solutions
- Collect compressed air data and pipe sizing recommendations
- Find Flow, Force and Heat conversions



Visit our PDF library and download

- Electronic files of the entire catalog or individual sections
- Installation and Maintenance Guides on every EXAIR product
- Our current price list to have all product prices in one convenient location

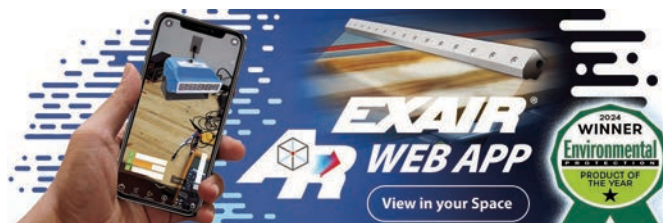
Follow our blog for 5 new entries a week and learn

- Details and installations of widely varied applications
- The methodology and results of critical mathematical formulas which help determine money savings, air savings, performance benefits and more
- New product releases before they reach our catalog or website
- More about EXAIR, our team and community involvement
- Go to blog.exair.com



Make social connections

- Watch over 150 videos on EXAIR's YouTube Channel and see product features and benefits, applications, Tips & Tricks, How-to, and our team members.
- Follow our Company on X@EXAIR or our Application Engineers and learn more about promotions, updates on manufacturing, engineering and international industry perspective.
- Connect with us on Facebook at facebook.com/exair or follow us on Linked In, Twitter and Instagram.



EXAIR's Augmented Reality Mobile Application

- Browse EXAIR's product offerings and pull up live 3D models
- Orient the model to see how it will fit in your space
- Tap hotspots to learn more about it
- Click the link to purchase the product



6 EXAIR Optimization

Minimize compressed air use and detect wasteful leaks

6 Steps to Optimization	6
Electronic Flow Control	7
Digital Flowmeter	10
Digital Sound Level Meter	17
Ultrasonic Leak Detector	18



20 Air Knives

Blowoff, clean, dry and cool with less noise and air consumption

Super Air Knife	20
Compare Blowoffs	23
Explanation of Materials	26
Universal Air Knife Mounting System	29
Plumbing Kits	29
Standard Air Knife	33
Full-Flow Air Knife	36



38 Air Wipes

Blowoff, dry, clean and cool pipe, cable, extruded shapes and hose

Super Air Wipes	38
Standard Air Wipes	42



44 Air Amplifiers

Vent, exhaust, cool, dry and clean - with no moving parts

Super Air Amplifiers	46
Adjustable Air Amplifiers	50



52 Air Nozzles and Jets

Reduce noise levels and air costs on blowoff operations

Air Nozzles	52
Air Nozzle Comparison Chart	54
Super Air Nozzles	55
Flat Super Air Nozzles	57
Super Air Scraper	57
Back Blow Air Nozzles	59
Safety Air Nozzles	60
Adjustable Air Nozzles	60
Air Jets	61
High Force Air Nozzles	63
High Force Air Nozzle Comparison Chart	63
High Force Flat Super Air Nozzles	63
High Force Super Air Nozzles	64
Super Air Nozzle Clusters	67
Stay Set Hoses	67
Swivel Fittings	68
Blowoff Systems	69



70 Air Atomizing Nozzles

All stainless steel construction for durability and corrosion resistance

1/8 NPT Atomizing Nozzles	71
Internal Mix Narrow Angle Round	71
Internal Mix Wide Angle Round	72
Internal Mix Flat Fan	73
External Mix Narrow Angle Flat Fan	74
Siphon Fed Round	75
Siphon Fed Flat Fan	76
1/4 NPT Atomizing Nozzles	77
Internal Mix Narrow Angle Round	77
Internal Mix Wide Angle Round	78
Internal Mix Flat Fan	79
Internal Mix Deflected Flat Fan	80
Internal Mix 360° Hollow Circular	80
External Mix Round	81
External Mix Narrow Angle Flat Fan	82
External Mix Wide Angle Flat Fan	83
Siphon Fed Round	84
Siphon Fed Flat Fan	85
1/2 NPT Atomizing Nozzles	86
Internal Mix Narrow Angle Round	86
Internal Mix Wide Angle Round	87
Internal Mix Flat Fan	88
Internal Mix 360° Hollow Circular	89
External Mix Narrow Angle Flat Fan	90
Siphon Fed Round	91



92 No Drip Air Atomizing Nozzles

Eliminate drips to conserve valuable liquids and improve product finishes.

1/8 NPT No Drip Atomizing Nozzles	93
No Drip Internal Mix Narrow Angle Round	93
No Drip Internal Mix Wide Angle Round	93
No Drip Internal Mix Flat Fan	94
No Drip External Mix Narrow Angle Flat Fan	95
No Drip Siphon Fed Round	96
No Drip Siphon Fed Flat Fan	96
1/4 NPT No Drip Atomizing Nozzles	93
No Drip Internal Mix Narrow Angle Round	93
No Drip Internal Mix Wide Angle Round	93
No Drip Internal Mix Flat Fan	94
No Drip Internal Mix Deflected Flat Fan	94
No Drip Internal Mix 360° Hollow Circular	94
No Drip External Mix Round	95
No Drip External Mix Narrow Angle Flat Fan	95
No Drip External Mix Wide Angle Flat Fan	95
No Drip Siphon Fed Round	96
No Drip Siphon Fed Flat Fan	96
1/2 NPT No Drip Atomizing Nozzles	93
No Drip Internal Mix Narrow Angle Round	93
No Drip Internal Mix Wide Angle Round	93
No Drip Internal Mix Flat Fan	94
No Drip Internal Mix 360° Hollow Circular	94
No Drip External Mix Narrow Angle Flat Fan	95
No Drip Siphon Fed Round	96



97 Liquid Atomizing Spray Nozzles

Stainless-steel nozzles to atomize pressurized liquids. No air required.

OmniStream Cone Nozzles, 1/4 NPT	98
OmniStream Cone Nozzles, 3/8 NPT	99
OmniStream Cone Nozzles, 1/2 NPT	100
NEW HollowStream Cone Nozzles, 1/8 NPT	101
HollowStream Cone Nozzles, 1/4 NPT	102
HollowStream Cone Nozzles, 3/8 NPT	103
HollowStream Cone Nozzles, 1/2 NPT	104
NEW PowerStream Cone Nozzles, 1/8 NPT	105



106 BETE Hydraulic Nozzles

Industry leading spray technology

MW MicroWhirl Misting & Fogging Nozzles	107
NF Standard Fan Nozzles	108
TF Full Cone Spray Nozzles	109
MP MaxiPass Maximum Free Passage Nozzles	110
WL Full Cone Nozzles	111
HC HydroClaw & TW Spiral Tank Washing Nozzles	112
HWS HydroWhirl Stinger & HWM HydroWhirl Mini	113
HWP HydroWhirl Poseidon & HWD HydroWhirl Disc	114

115

Safety Air Guns

Safety air guns use engineered air nozzles for high performance

Chip Shields.....	116
VariBlast® Precision Safety Air Guns.....	117
VariBlast® Compact Safety Air Guns.....	118
Soft Grip Safety Air Guns.....	120
Soft Grip Super Air Scraper.....	123
Heavy Duty Safety Air Guns.....	124
Back Blow Safety Air Guns.....	125
TurboBlast® Safety Air Guns.....	126
Super Blast Safety Air Guns.....	128

130

Gen4® Static Eliminators

Eliminate static electricity, dust and shock hazard

Gen4® Super Ion Air Knife.....	132
Static Meter.....	134
Gen4® Standard Ion Air Knife.....	138
Gen4® Ionizing Bars.....	140
Gen4® Super Ion Air Wipes.....	142
Gen4® Ion Air Cannon.....	144
Gen4® Ion Air Gun.....	146
Gen4® Ion Air Jet/Gen4 Stay Set Ion Air Jet.....	148
Gen4® Ionizing Point.....	150
Gen4® Power Supplies.....	151
Intellistat® Ion Air Gun.....	152
Intellistat® Ion Air Nozzle.....	154
Varistat Bench Ionizer.....	156

158

E-Vac® Vacuum Generators

Vacuums for lifting, clamping, mounting and placement

How to Build an E-Vac System.....	159
In-Line.....	160
Adjustable.....	163
Vacuum Cups.....	165

169

Air Operated Conveyors

Convey parts, materials and waste - with no moving parts

Line Vac.....	169
Threaded Line Vac.....	175
Heavy Duty Line Vac.....	178
Sanitary Flange Line Vac.....	180
Light Duty Line Vac.....	182

184

Industrial Housekeeping

Reliable vacuums for chip removal, liquid transfer and cleaning

EasySwitch® Wet-Dry Vac.....	185
Reversible Drum Vac.....	187
High Lift Reversible Drum Vac.....	189
Chip Trapper.....	191
High Lift Chip Trapper.....	193
Chip Vac.....	195
Heavy Duty Dry Vac.....	197
Heavy Duty HEPA Vac.....	199
Vac-u-Gun.....	201

203

Vortex Tubes & Spot Cooling

Cold air for industrial spot cooling problems

Vortex Tubes.....	203
Adjustable Spot Cooler.....	211
Mini Cooler.....	214

215

Cold Gun Aircoolant Systems

Cool machining operations with clean, cold air

219

Cabinet Cooler® Systems

Cool and purge NEMA 12, 4 and 4X electrical control panels

How it Works.....	220
Selecting the Right Model.....	220
Special Cabinet Coolers.....	221
Calculating Heat Load.....	223
Cabinet Cooler Sizing Guide.....	224
NEMA 12 Models.....	226
NEMA 4 Models.....	227
NEMA 4X Models.....	228
Cabinet Cooler System Accessories.....	229
Hazardous Location Cabinet Coolers.....	230
ATEX Cabinet Coolers.....	232

234

Accessories

Mufflers, filters, regulators, valves, swivel fittings and more

Filters.....	234
Regulators.....	235
Silencing Mufflers.....	236
Valves, Swivels, Thermostats.....	238
Magnetic Bases, Stay Sets, Hoses.....	239
Air Hoses.....	239
Fittings.....	240
Receiver Tank.....	240



Catalog item orders received before 2 pm EDT/EST are generally shipped from Cincinnati, Ohio on the same day. You can expect delivery within 1-4 days depending on your location.

Terms and Conditions (U.S. and Canada Only)

Terms: Net 30 days upon credit approval, Visa, MasterCard, Discover and American Express.



Cards

ICC (International Chamber of Commerce)
INCOTERM 2020:

Delivery

EX WORKS (EXAIR, 11510 Goldcoast Dr., Cincinnati, Ohio 45249, USA.)

All cataloged products are shipped from stock, via U.P.S. within 24 hours after receipt of order. Priority shipment is available upon request.

Ordering:

Call 1-800-903-9247 or +1-513-671-3322

Worldwide 7:00 a.m. to 4:00 p.m. ET (Mon. - Fri.)

Fax toll free 1-866-329-3924 or

Worldwide +1-513-671-3363

E-mail: orders@exair.com

Secure website: www.exair.com

Remit to address (payments only):

EXAIR Location 00766, Cincinnati, Ohio 45264-0766

Tax:

Sales and use tax, where applicable, are not included.

Technical Assistance:

Please call our Application Engineering Department,

1-800-90-EXAIR (1-800-903-9247)

e-mail at techhelp@exair.com.



Warranty:

5 Year "Built To Last" Warranty against defects in workmanship and materials on all compressed air products*. Defective products must be returned freight prepaid for repair or replacement at our option. This warranty applies under conditions of normal use, but does not apply to defects that result from intentional damage, negligence, unreasonable use, wear or exposure.

* 5 Year Warranty applies to compressed air products only.
A 1 Year Warranty applies to all accessories and electrically powered products.

EXAIR's Unconditional Guarantee:

Extends to all U.S. and Canadian customers and includes invoiced U.P.S. Ground Service shipping charges. Products returned after the 30 day guarantee period are subject to a 15% restocking charge. Products must be returned freight prepaid.



Copyright Restrictions:

The content of the EXAIR Catalog, including all photos, graphics, drawings and arrangements are proprietary to EXAIR LLC and are protected by the United States and international copyright and trademark laws. You are authorized to use the contents of the EXAIR Catalog for personal use or as it relates to your role as a current or prospective customer of EXAIR. The contents of this catalog may not be copied or modified for any type of publication or distribution without the prior written consent of EXAIR. The content of the EXAIR Catalog is the intellectual property solely of EXAIR with no rights transferred to other parties. No part of this catalog may be reproduced for any commercial purposes without the express authorization in writing by EXAIR.

Trademarks:

"EXAIR.com", "EXAIR", "Cabinet Cooler", "E-Vac", "Intelligent Compressed Air", "VariBlast", "Gen4", "Intellistat", "EasySwitch", "TurboBlast", "Varistat" and "Compressed Air Intelligence" are registered trademarks of the EXAIR LLC. The EXAIR logo, product names, designs and descriptive phrases are trademarked by EXAIR. These trademarks may not be used without prior written permission of EXAIR.

EXAIRLogger, EFC, Digital Flowmeter, Hot Tap Digital Flowmeter, Digital Sound Level Meter, High Power Cold Gun, Super Air Knife, Standard Air Knife, Full-Flow Air Knife, Air Cannon, Super Air Amplifier, Adjustable Air Amplifier, Super Air Nozzle, Micro Air Nozzle, High Power Safety Air Nozzle, Stay Set Hose, Soft Grip Super Air Scraper, Super Air Scraper, Super Blast Safety Air Gun, Super Air Wipe, Heavy Duty Line Vac, Light Duty Line Vac, Sanitary Flange Line Vac, Threaded Line Vac, OmniStream, PowerStream, HollowStream, Standard Air Wipe, Super Ion Air Knife, Standard Ion Air Knife, Super Ion Air Wipe, Ion Air Cannon, Ion Air Gun, Ion Air Jet, Ionizing Point, Stay Set Ion Air Jet, Line Vac, Chip Vac, Heavy Duty Dry Vac, Heavy Duty HEPA Vac, Reversible Drum Vac, High Lift Reversible Drum Vac, Chip Trapper, High Lift Chip Trapper, Vac-u-Gun, Deep Hole Vac-u-Gun, Air Disk, Air Stik, Mini Cooler, Cold Gun Aircoolant System, and ETC are trademarks of EXAIR LLC.

EXAIR.com

11510 Goldcoast Dr.
Cincinnati, Ohio 45249-1621
Phone Number: (513) 671-3322
Fax Number: (513) 671-3363
E-mail: techhelp@exair.com
Web Site: www.exair.com



Intelligent Compressed Air® products are identified throughout this catalog that can help your plant save tens of thousands of dollars over the course of a single year. *The Best Practices for Compressed Air Systems* manual published by the Compressed

Air Challenge® recommends products like the Super Air Knife™, Super Air Amplifier™, and the family of Super Air Nozzles™ for energy conservation. Many of the products shown offer unique ways to solve common industrial problems using compressed air. Compressed Air Challenge is a registered trademark of Compressed Air Challenge, Inc.



EXAIR has partnered with Energy Star, a voluntary program of the U.S. Department of Energy and the Environmental Protection Agency. Energy Star offers energy efficient solutions to help save money while protecting the environment for future generations. EXAIR has implemented improved energy management practices and technologies throughout our facility, including energy efficient lighting, HVAC systems, and electronic thermostats. EXAIR's participation in this program underscores our commitment to conserving energy.

EXAIR products are subject to ongoing development. Specifications are subject to change without notice.

Some products in this catalog are covered by U.S. Patent #5402938, #8153001, #8268179, #D903,817, #10,779,698, #9156045 and 11,969,134, others may be U.S. Patent Pending. EU Regd. Des. No.00770318-0001 and No. 009025463-0001 © Mexico No.60723; Canada No.194141, UK Registered Design No. 6211314

Copyright ©2025 EXAIR LLC. All Rights Reserved.



EXAIR's Intelligent Compressed Air® products vs your current installation

How does the Efficiency Lab work?

Our Efficiency Lab service begins with receiving a sample of the product(s) you currently use for your application. One of our qualified Application Engineers will use calibrated testing equipment to compare the performance of your existing product(s) to an EXAIR engineered solution. These tests will determine air consumption, noise levels and force. The test results will then be published in a comprehensive report, which includes a cost savings analysis, and be provided to you. For most applications, EXAIR products can help you improve application efficiency AND typically pay for themselves in a matter of weeks.

How can I get a product tested for free?

To participate in our FREE Efficiency Lab please contact one of our Application Engineers and get the details about sending us your product(s).

You may reach an Application Engineer by phone at (800) 903-9247 or (513) 671-3322. You can send an email to lab@exair.com or visit our website and take advantage of our live help at www.exair.com.

EXAIR's FREE Efficiency Lab service determines how much air and dollar savings you will achieve by installing one of our Intelligent Compressed Air products.

Unable to send your product to EXAIR's Efficiency Lab?

If it is not possible to send us your product, we have a one page Product Efficiency Survey on our website (exair.com/labdoc) where you can provide us the details about a current inefficient compressed air application. Fill in the information and click submit. You will hear from one of our Application Engineers within three business days.

Okay, so what is the fine print?

This service is available to all customers in the U.S. and Canada only. Some restrictions may apply.

What about confidentiality?

Yes, EXAIR will keep the results of our Efficiency Lab test and report confidential unless given permission to share that information with others.

Products must be shipped to EXAIR prepaid. EXAIR will pay the return shipping via UPS Ground.



Air Atomizing Spray Nozzles

All stainless steel construction for durability and corrosion resistance!

What Are Atomizing Nozzles?

EXAIR's Atomizing Spray Nozzles atomize fluids (most commonly water) in a range of spray patterns for a variety of uses. They combine liquid and compressed air to create a mist of atomized liquid that can be easily adjusted to meet the needs of your application. All models use stainless steel construction for durability and corrosion resistance. Atomizing spray nozzles are available in 1/8 NPT, 1/4 NPT and 1/2 NPT sizes.

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 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.

Air Atomizing Spray Nozzles



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

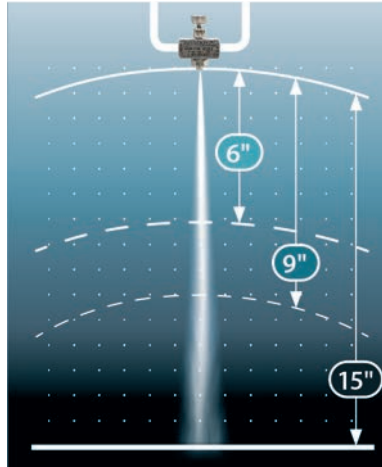
Model: AN8050SS

Material: Type 303 Stainless Steel

Model AN8010SS, AN8020SS, AN8030SS, AN8040SS and AN8050SS

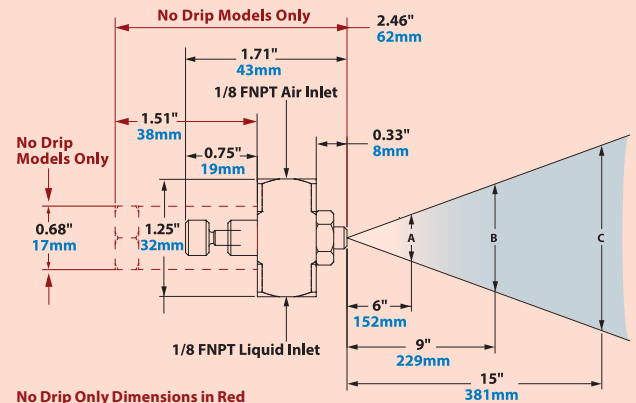
1/8 NPT internal mix narrow angle round pattern nozzles are excellent for spraying a concentrated mist of liquid. Because of the versatility of their adjustments, they can apply a heavy coat up close or send a very fine mist over 16 feet away! They are often used for precision application of lubricants 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



Spray Nozzles

10 PSI/0.7 BAR Liquid							20 PSI/1.4 BAR Liquid						30 PSI/2.1 BAR Liquid						40 PSI/2.8 BAR Liquid						60 PSI/4.1 BAR Liquid						Spray Dimensions																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
Model	Air Pressure PSI/BAR		GPH/LPH		SCFM/ SLPM		Air Pressure PSI/BAR		GPH/LPH		SCFM/ SLPM		Air Pressure PSI/BAR		GPH/ LPH		SCFM/ SLPM		Air Pressure PSI/BAR		GPH/ LPH		SCFM/ SLPM		Air Pressure PSI/BAR		GPH/LPH		SCFM/ SLPM		Pressure		Width						Max. Depth feet/m																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
																															Air PSI/ BAR	Liquid PSI/ BAR	A	B	C																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													

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

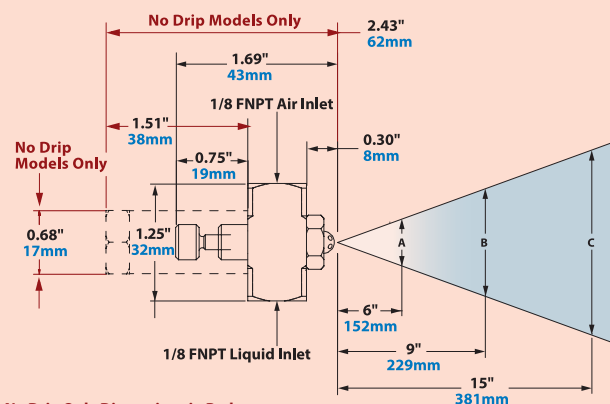
EXAIR's 1/8 NPT internal mix wide angle round pattern atomizing nozzles are great for covering a broad area. They can be adjusted for a light mist or a heavy soaking spray. They are popular for dust mitigation, humidification, and cooling of products, people or livestock in a broad area. These nozzles 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



No Drip Only Dimensions in Red
See page 93 for No Drip Atomizing Nozzles

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

Air Atomizing Spray Nozzles



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

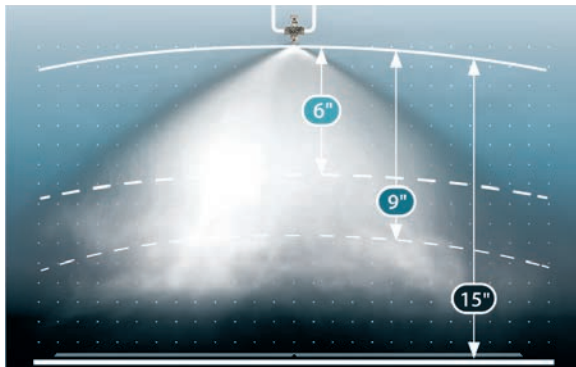
Model: AF8040SS

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.

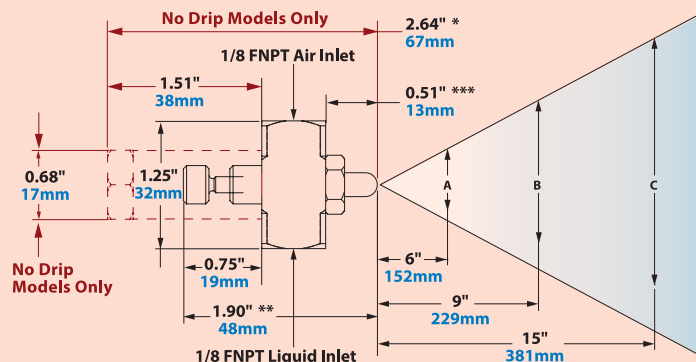
Spray Nozzles

Dimensions and Airflow Pattern



No Drip Dimensions In Red
See page 93 for No Drip Atomizing Nozzles

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



10 PSI/0.7 BAR Liquid						20 PSI/1.4 BAR Liquid						30 PSI/2.1 BAR Liquid						40 PSI/2.8 BAR Liquid						60 PSI/4.1 BAR Liquid						Spray Dimensions													
Model	Air Pressure PSI/BAR		GPH/ LPH		SCFM/ SLPM		Air Pressure PSI/BAR		GPH/ LPH		SCFM/ SLPM		Air Pressure PSI/BAR		GPH/ LPH		SCFM/ SLPM		Air Pressure PSI/BAR		GPH/ LPH		SCFM/ SLPM		Air Pressure PSI/BAR		GPH/ LPH		SCFM/ SLPM		Pressure			Width						Max. Depth feet/m			
																															Air PSI/ BAR	Liquid PSI/BAR	A	B	C								
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

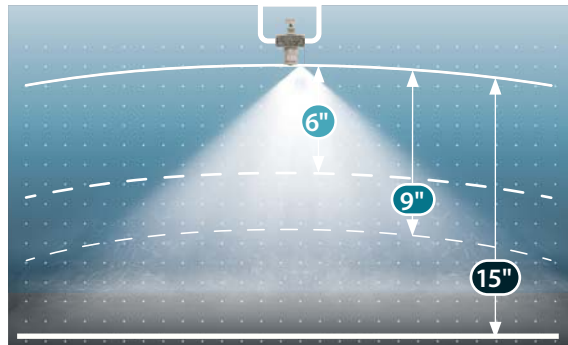
Model: EF8050SS

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

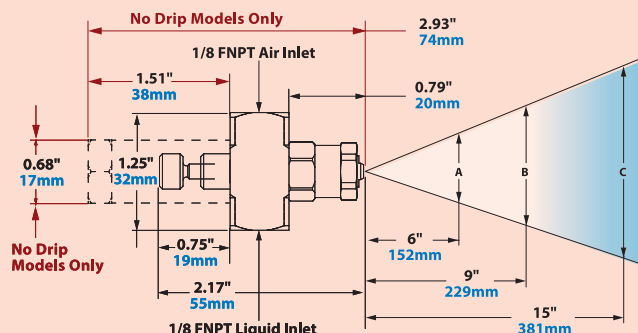


1/8 NPT External Mix Flat Fan atomizing nozzles are very versatile. They can apply a light or heavy film coating to products on a variety of different products.



Model EF8010SS applies lubricant to a drawer slide.

Dimensions and Airflow Pattern



No Drip Dimensions In Red
See page 93 for No Drip Atomizing Nozzles

10 PSI/0.7 BAR Liquid				20 PSI/1.4 BAR Liquid				30 PSI/2.1 BAR Liquid				40 PSI/2.8 BAR Liquid				Spray Dimensions																
Model	Air Pressure PSI/BAR	GPH/LPH		SCFM/ SLPM		Air Pressure PSI/BAR	GPH/LPH		SCFM/ SLPM		Air Pressure PSI/BAR	GPH/LPH		SCFM/ SLPM		Air Pressure PSI/BAR	GPH/LPH		SCFM/ SLPM		Pressure		Width						Max. Depth feet/m			
																					Air PSI/ BAR	Liquid PSI/ BAR	A		B		C					
																					in	cm	in	cm	in	cm						
EF8010SS	10	0.7	1.22	4.6	1.20	34.0	10	0.7	1.20	34.0	10	0.7	1.20	34.0	10	0.7	1.20	34.0	10	0.7	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	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	50	3.4	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
EF8020SS	10	0.7	2.00	7.6	1.20	34.0	10	0.7	1.20	34.0	10	0.7	1.20	34.0	10	0.7	1.20	34.0	10	0.7	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	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	50	3.4	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
EF8030SS	10	0.7	4.47	16.9	1.20	34.0	10	0.7	1.20	34.0	10	0.7	1.20	34.0	10	0.7	1.20	34.0	10	0.7	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	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	50	3.4	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
EF8040SS	20	1.4	8.67	32.8	1.95	55.2	20	1.4	1.95	55.2	20	1.4	1.95	55.2	20	1.4	1.95	55.2	20	1.4	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	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	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	104.2	50	3.4	3.68	104	50	3.4	40	2.8	5.5	14	7	18	11	28
EF8050SS	30	2.1	12.6	47.7	2.28	64.5	30	2.1	2.28	64.5	30	2.1	2.28	64.5	30	2.1	2.28	64.5	30	2.1	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	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	109.6	60	4.1	70	4.8	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	126.0	70	4.8	4.45	126										

Air Atomizing Spray Nozzles



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

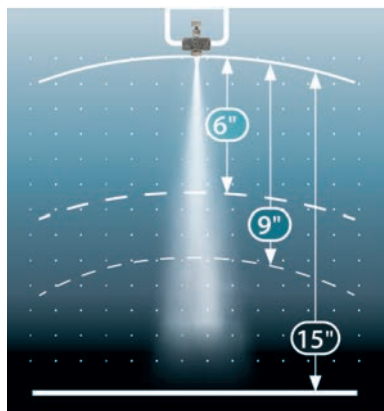
Model: SR8050SS

Material: Type 303 Stainless Steel

Model SR8010SS, SR8020SS, SR8030SS, SR8040SS and SR8050SS

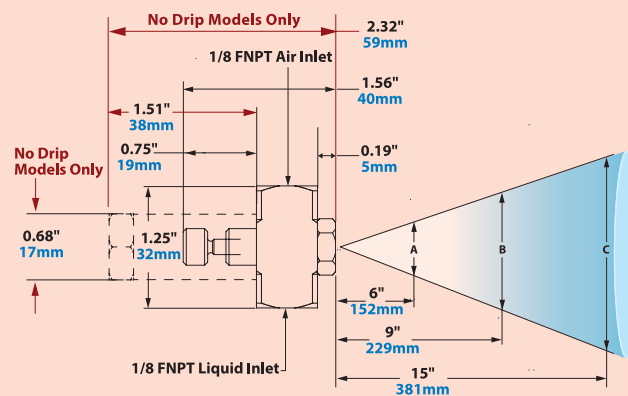
1/8 NPT siphon fed round pattern nozzles are great where no liquid pressure is available and a thin coating is needed at a specific area. Flow rate is adjustable via the adjusting valve. Siphon nozzles work best with a suction height of 36" (914mm) or less. Since these nozzles are siphon fed, the compressed 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



No Drip Only Dimensions in Red
See page 93 for No Drip Atomizing Nozzles

Spray
Nozzles

Liquid Flow in GPH/LPH																			Spray Dimensions at 8" (20cm) Siphon Height											
Model	Air				Gravity Head						Siphon Height									Air		Width							Max. Depth feet/m	
	Pressure PSI/BAR		SCFM/ SLPM		18"	46cm	12"	30cm	6"	15cm	4"	10cm	8"	20cm	12"	30cm	24"	61cm	36"	91cm	Pressure PSI/BAR	A in cm		B in cm		C in cm				
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	—	—	—	—	10	0.7	1.5	4	2	5	3	8	1.5	0.5
	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	—	—	20	1.4	1.5	4	2	5	3	8	1.5	0.5
	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	40	2.8	1.5	4	2	5	3	8	2	0.6
	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	60	4.1	1.5	4	2	5	3	8	3	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	—	—	—	—	10	0.7	1.5	4	2	5	3	8	1.5	0.5
	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	—	—	20	1.4	1.5	4	2	5	3	8	2	0.6
	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	40	2.8	1.5	4	2	5	3	8	3	0.9
	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	60	4.1	1.5	4	2	5	3	8	4	1.2
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	—	—	—	—	10	0.7	1.5	4	2	5	3	8	1.5	0.5
	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	—	—	20	1.4	1.5	4	2	5	3	8	3	0.9
	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	40	2.8	1.5	4	2	5	3	8	4	1.2
	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	60	4.1	1.5	4	2	5	3	8	5	1.5
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	—	—	—	—	—	—	10	0.7	1.5	4	2	5	3	8	3	0.9
	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	—	—	—	—	20	1.4	1.5	4	2	5	3	8	4	1.2
	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	40	2.8	1.5	4	2	5	3	8	4	1.2
	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	60	4.1	1.5	4	2	5	3	8	5	1.5
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	1.5	4	2	5	3	8	5	1.5
	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	1.5	4	2	5	3	8	7	2.1
	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	1.5	4	2	5	3	8	9	2.7
	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	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

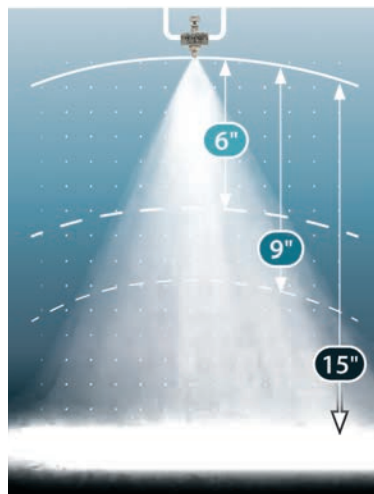
Model: SF8030SS

Material: Type 303 Stainless Steel

Model SF8010SS, SF8020SS and SF8030SS

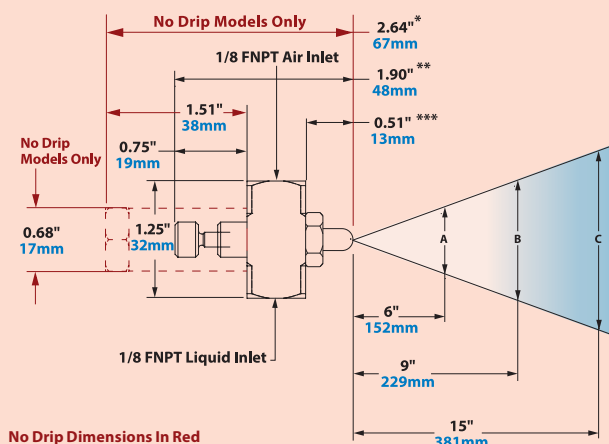
1/8 NPT siphon fed flat fan pattern nozzles are great where no liquid pressure is available and a thin coating is needed over a wide band. Flow rate is adjustable via the adjusting valve. Siphon nozzles work best with a suction height of 36" (914mm) or less. Since these nozzles are siphon fed, the compressed 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



No Drip Dimensions in Red
See page 93 for No Drip Atomizing Nozzles

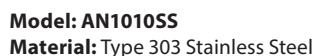
* Model SF8010SS 2.48" / 63mm
** Model SF8010SS 1.74" / 44mm
*** Model SF8010SS 0.36" / 9mm

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

**An INTELLIGENT
COMPRESSED AIR®
Product**



New Equipment Digest
KING
awards
2011 WINNER



Model: AN1020SS
Material: Type 303 Stainless Steel

Model: AN1030SS
Material: Type 303 Stainless Steel

Model: AN1040SS
Material: Type 303 Stainless Steel

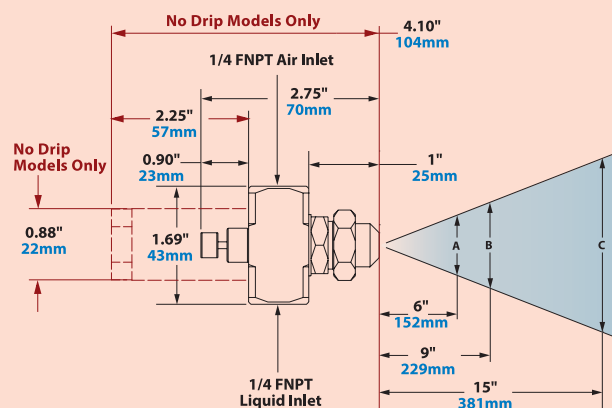
1/4 NPT internal mix narrow angle round pattern nozzles are excellent for spraying a concentrated mist of liquid. Because of the versatility of their adjustments, they can apply a heavy coat up close or send a very fine mist over 30 feet away! They are often used for precision application of lubricants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

DOWNLOAD
drawings at
EXAIR.com



No Drip Only Dimensions in Red
See page 93 for No Drip Atomizing Nozzles

Spray Nozzles

10 PSI/0.7 BAR Liquid						20 PSI/1.4 BAR Liquid						30 PSI/2.1 BAR Liquid						40 PSI/2.8 BAR Liquid						60 PSI/4.1 BAR Liquid						Spray Dimensions												
Model	Air Pressure PSI/BAR		GPH/ LPH		SCFM/ SLPM		Air Pressure PSI/BAR		GPH/ LPH		SCFM/ SLPM		Air Pressure PSI/BAR		GPH/ LPH		SCFM/ SLPM		Air Pressure PSI/BAR		GPH/ LPH		SCFM/ SLPM		Air Pressure PSI/BAR		GPH/ LPH		SCFM/ SLPM		Pressure						Max. Depth feet/m					
																															Width											
																														Air PSI/ BAR	Liquid PSI/BAR	A		B		C						
																														in	cm	in	cm	in	cm							
ANT101055	10	0.7	1.4	5.3	0.6	17	18	1.2	1.8	6.8	0.9	25	24	1.7	2.3	8.7	1.0	28	30	2.1	2.7	10.2	1.2	34	40	2.8	3.3	12.5	1.5	42	12	0.8	10	0.7	2.3	6	3.3	8	5.0	13	6	1.8
	12	0.8	1.2	4.5	0.7	20	22	1.5	1.6	6.1	1.0	28	32	2.2	1.9	7.2	1.3	37	38	2.6	2.3	8.7	1.5	42	52	3.6	2.8	10.6	1.9	54	20	1.4	20	1.4	2.8	7	3.8	10	6.0	15	8	2.4
	14	1.0	1.1	4.2	0.8	23	24	1.7	1.5	5.7	1.1	31	36	2.5	1.6	6.1	1.5	42	44	3.0	1.9	7.2	1.7	48	62	4.3	2.3	8.7	2.4	68	34	2.3	30	2.1	3.0	8	4.3	11	6.5	17	9	2.7
	—	—	—	—	—	—	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	42	2.9	40	2.8	3.5	9	4.5	11	6.5	17	10	3.0
ANT102055	16	1.1	3.7	14.0	2.8	79	28	1.9	5.2	19.7	4.0	113	40	2.8	6.0	22.7	5.2	147	48	3.3	7.0	26.5	5.9	167	65	4.5	9.9	37.5	7.0	198	24	1.7	10	0.7	2.5	6	3.5	9	5.5	14	11	3.4
	20	1.4	2.5	9.5	3.4	96	36	2.5	2.7	10.2	5.1	144	48	3.3	3.8	14.4	6.4	181	65	4.5	3.6	13.6	8.1	229	80	5.5	6.6	25.0	8.6	244	38	2.6	20	1.4	2.8	7	4.0	10	6.5	17	12	3.7
	24	1.7	1.4	5.3	4.0	113	40	2.8	1.7	6.4	5.7	161	55	3.8	2.1	7.9	7.3	207	75	5.2	1.4	5.3	9.8	277	90	6.2	4.5	17.0	10.1	286	55	3.8	30	2.1	3.0	8	4.5	11	6.5	17	13	4.0
	28	1.9	0.6	2.3	4.6	130	44	3.0	0.8	3.0	6.4	181	60	4.1	1.1	4.2	8.1	229	80	5.5	0.8	3.0	10.2	289	100	6.9	2.4	9.1	11.3	320	65	4.5	40	2.8	3.5	9	5.0	13	7.0	18	14	4.3
ANT103055	12	0.8	7.8	29.5	1.9	54	20	1.4	12.9	48.8	2.5	71	30	2.1	15.1	57.2	3.4	96	38	2.6	18.0	68.1	4.1	116	54	3.7	23.0	87.1	5.3	150	14	1.0	10	0.7	2.8	7	4.5	11	6.5	17	10	3.0
	14	1.0	6.0	22.7	2.2	62	24	1.7	9.8	37.1	3.0	85	38	2.6	9.4	35.6	4.5	127	46	3.2	13.1	49.6	5.1	144	65	4.5	17.1	64.7	6.7	190	26	1.8	20	1.4	3.3	8	5.0	13	7.0	18	16	4.9
	16	1.1	4.4	16.7	2.6	74	28	1.9	7.0	26.5	3.6	102	42	2.9	7.0	26.5	5.1	144	52	3.6	9.6	36.3	6.0	170	75	5.2	12.3	46.6	8.0	227	40	2.8	30	2.1	3.8	10	5.5	14	7.0	18	19	5.8
	18	1.2	3.3	12.5	2.9	82	32	2.2	4.1	15.5	4.4	125	46	3.2	5.0	18.9	5.9	167	56	3.9	7.3	27.6	6.6	187	85	5.9	7.3	27.6	9.6	272	50	3.4	40	2.8	4.0	10	6.0	15	8.0	20	22	6.7
ANT104055	14	1.0	6.3	23.8	3.5	99	20	1.4	24.0	90.8	3.0	85	28	1.9	33.0	125	3.4	96	32	2.2	46.5	176	2.8	79	42	2.9	66.0	250	2.7	76	14	1.0	10	0.7	3.0	8	4.5	11	6.5	17	17	5.2
	16	1.1	3.0	11.4	4.2	119	24	1.7	13.0	49.2	4.2	119	32	2.2	24.0	90.8	4.6	130	40	2.8	30.0	114	5.1	144	50	3.4	54.0	204	4.3	122	24	1.7	20	1.4	3.5	9	6.0	15	7.5	19	21	6.4
	—	—	—	—	—	—	26	1.8	9.0	34.1	4.9	139	36	2.5	12.5	47.3	5.9	167	46	3.2	16.5	62.5	6.8	193	58	4.0	39.0	148	6.6	187	44	2.3	30	2.1	4.0	10	6.5	17	8.0	20	26	7.9
	—	—	—	—	—	—	28	1.9	5.5	20.8	5.6	159	40	2.8	6.0	22.7	7.4	210	50	3.4	10.3	39.0	8.2	232	70	4.8	15.8	60	10.2	289	64	4.4	60	4.1	5.0	13	7.0	18	9.0	23	35	10.7

Internal Mix Wide Angle Round Pattern - 1/4 NPT



Model: AW1010SS
Material: Type 303 Stainless Steel

Model: AW1020SS
Material: Type 303 Stainless Steel

Model: AW1030SS
Material: Type 303 Stainless Steel

Model: AW1040SS
Material: Type 303 Stainless Steel

Model AW1010SS, AW1020SS, AW1030SS, and AW1040SS

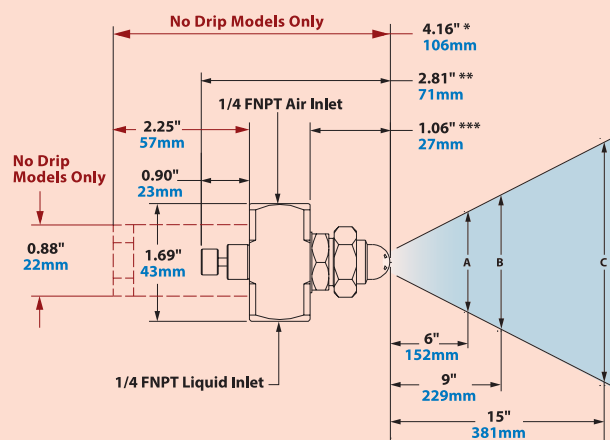
EXAIR's 1/4 NPT internal mix wide angle round pattern atomizing nozzles are great for covering a broad area. They can be adjusted for a light mist or a heavy soaking spray. They are popular for dust mitigation, humidification, and cooling of products, people or livestock in a broad area. These nozzles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

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



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

Dimensions and Airflow Pattern



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

No Drip Only Dimensions in Red
See page 93 for No Drip Atomizing Nozzles

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

**An INTELLIGENT
COMPRESSED AIR®
Product**



New Equipment Depot
KING
awards
2011 WINNER



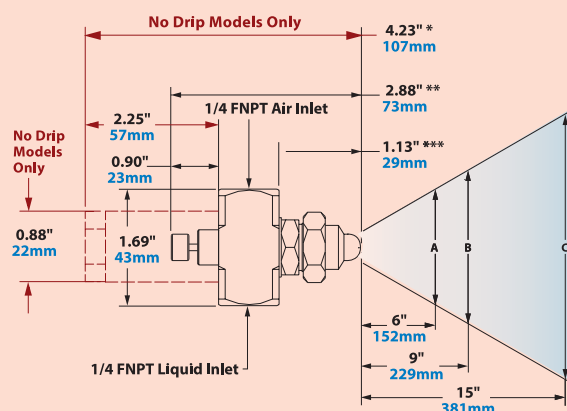
Plant Engineering
PRODUCT
of the **YEAR**
Finalist
2011



Material: Type 303 Stainless Steel

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.

Dimensions and Airflow Pattern



***Model AF1010SS & AF1020SS: 1" / 25mm

No Drip Only Dimensions in Red
See page 93 for No Drip Atomizing Nozzles

10 PSI/0.7 BAR Liquid												20 PSI/1.4 BAR Liquid						30 PSI/2.1 BAR Liquid						40 PSI/2.8 BAR Liquid						60 PSI/4.1 BAR Liquid						Spray Dimensions													
Model	Air Pressure PSI/BAR		GPH/ LPH		SCFM/ SLPM		Air Pressure PSI/BAR		GPH/ LPH		SCFM/ SLPM		Air Pressure PSI/BAR		GPH/ LPH		SCFM/ SLPM		Air Pressure PSI/BAR		GPH/ LPH		SCFM/ SLPM		Air Pressure PSI/BAR		GPH/ LPH		SCFM/ SLPM		Pressure		Width						Max. Depth feet/m										
																															Air PSI/ BAR	Liquid PSI/BAR	A	B	C														
AF1010SS	10	0.7	1.6	6.1	0.7	20	18	1.2	2.1	7.9	1.0	28	28	1.9	2.4	9.1	1.4	40	38	2.6	2.6	9.8	1.7	48	55	3.8	3.2	12.1	2.2	62	16	1.1	10	0.7	9	23	12	30	15	38	5	1.5							
	14	1.0	1.4	5.3	0.9	25	26	1.8	1.7	6.4	1.3	37	40	2.8	1.8	6.8	1.8	51	50	3.4	2.0	7.6	2.1	59	75	5.2	2.3	8.7	3.0	85	30	2.1	20	1.4	11	28	13	33	17	43	6	1.8							
	18	1.2	1.1	4.2	1.1	31	34	2.3	1.2	4.5	1.7	48	48	3.3	1.4	5.3	2.1	59	60	4.1	1.6	6.1	2.5	71	90	6.2	1.6	6.1	3.6	102	50	3.4	40	2.8	14	36	16	41	22	56	7	2.1							
	22	1.5	0.8	3.0	1.3	37	40	2.8	0.8	3.0	1.9	54	55	3.8	1.0	3.8	2.4	68	70	4.8	1.2	4.5	3.0	85	100	6.9	1.3	4.9	4.1	116	85	5.9	60	4.1	14	36	17	43	23	58	7	2.1							
AF1020SS	12	0.8	2.4	9.1	0.7	20	20	1.4	3.4	12.9	0.9	25	30	2.1	3.9	14.8	1.2	34	38	2.6	4.6	17.4	1.4	40	65	4.5	4.7	17.8	2.2	62	16	1.1	10	0.7	11	28	14	36	19	48	5	1.5							
	16	1.1	1.8	6.8	0.9	25	28	1.9	2.4	9.1	1.2	34	38	2.6	2.9	11.0	1.5	42	50	3.4	3.2	12.1	1.9	54	75	5.2	3.7	14.0	2.6	74	30	2.1	20	1.4	14	36	17	43	21	53	6	1.8							
	18	1.2	1.5	5.7	1.0	28	32	2.2	1.8	6.8	1.5	42	46	3.2	2.0	7.6	1.9	54	60	4.1	2.2	8.3	2.3	65	85	5.9	2.8	10.6	3.0	85	50	3.4	40	2.8	16	41	19	48	26	66	7	2.1							
	20	1.4	1.3	4.9	1.1	31	36	2.5	1.4	5.3	1.7	48	50	3.4	1.6	6.1	2.1	59	70	4.8	1.4	5.3	2.8	79	95	6.6	2.1	7.9	3.6	102	85	5.5	60	4.1	16	41	21	53	29	74	8	2.4							
AF1030SS	16	1.1	4.5	17.0	2.0	57	28	1.9	6.0	22.7	2.8	79	38	2.6	7.0	26.5	3.5	99	46	3.2	8.5	32.2	4.0	113	65	4.5	11.0	41.6	5.3	150	20	1.4	10	0.7	11	28	14	36	19	48	10	3.0							
	20	1.4	3.3	12.5	2.4	68	32	2.2	5.0	18.9	3.1	88	42	2.9	6.4	24.2	3.8	108	52	3.6	7.5	28.4	4.5	127	70	4.8	10.0	37.9	5.7	161	32	2.2	20	1.4	15	38	17	43	23	58	11	3.4							
	24	1.7	2.4	9.1	2.7	76	34	2.3	4.5	17.0	3.3	93	46	3.2	5.5	20.8	4.1	116	58	4.0	6.3	23.8	4.9	139	80	5.5	8.0	30.3	6.4	181	54	3.7	40	2.8	19	48	25	64	33	84	14	4.3							
	28	1.9	1.5	5.7	3.1	88	36	2.5	3.9	14.8	3.5	99	48	3.3	5.1	19.3	4.4	125	60	4.1	6.0	22.7	5.2	147	90	6.2	6.4	24.2	7.2	204	75	5.2	60	4.1	20	51	26	66	35	89	15	4.6							
AF1040SS	12	0.8	8.1	30.7	1.4	40	22	1.5	12.0	45.4	1.9	54	34	2.3	13.1	49.6	2.7	76	46	3.2	14.3	54.1	3.4	96	65	4.5	18.3	69.3	4.5	127	16	1.1	10	0.7	14	36	18	46	24	61	10	3.0							
	16	1.1	5.9	22.3	1.8	51	30	2.1	7.1	26.9	2.7	76	42	2.9	8.9	33.7	3.4	96	54	3.7	10.3	39.0	4.1	116	80	5.5	11.9	45.0	5.9	167	32	2.2	20	1.4	15	38	19	48	27	69	12	3.7							
	18	1.2	5.0	18.9	2.0	57	34	2.3	5.6	21.2	3.1	88	48	3.3	6.3	23.8	4.1	116	60	4.1	7.9	29.9	4.8	136	90	6.2	8.5	32.2	6.8	193	46	3.2	30	2.1	17	43	23	58	30	76	13	4.0							
	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	56	3.9	40	2.8	20	51	25	64	34	86	15	4.6							
AF1050SS	14	1.0	8.8	33.3	3.0	85	26	1.8	11.5	43.5	4.3	122	34	2.3	20.8	78.7	4.6	130	42	2.9	30.0	114	4.8	136	58	4.0	42.0	159	5.5	156	14	1.0	10	0.7	14	36	18	46	23	58	10	3.0							
	16	1.1	5.3	20.1	3.7	105	28	1.9	7.8	29.5	4.9	139	36	2.5	17.0	64.3	4.9	139	46	3.2	20.5	77.6	6.1	173	65	4.5	30.0	114	6.8	193	26	1.8	20	1.4	15	38	19	48	24	61	13	4.0							
	---	---	---	---	---	---	---	---	---	---	---	---	40	2.8	9.0	34.1	6.1	179	50	3.4	13.5	51.1	7.3	207	70	4.8	21.0	79.5	8.7	246	38	2.6	30	2.1	16	41	20	51	25	64	16	4.9							
	---	---	---	---	---	---	---	---	---	---	---	---	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	48	3.3	40	2.8	17	43	21	53	29	74	19	5.8							

Internal Mix Deflected Flat Fan Pattern - 1/4 NPT



Model: AD1010SS

Material: Type 303 Stainless Steel



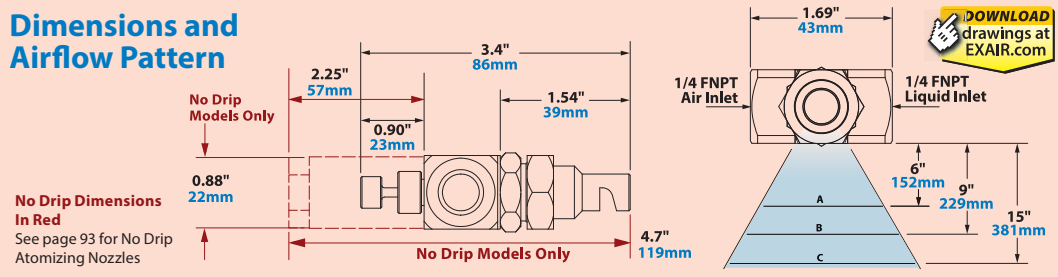
A Model AD1010SS is used to apply a protective coating to wood panels.

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



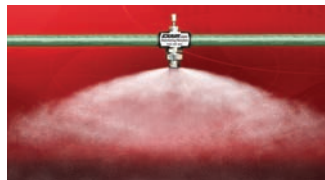
10 PSI/0.7 BAR Liquid															20 PSI/1.4 BAR Liquid															30 PSI/2.1 BAR Liquid															40 PSI/2.8 BAR Liquid															60 PSI/4.1 BAR Liquid															Spray Dimensions											
Model	Air Pressure PSI/BAR					GPH/ LPH					SCFM/ SLPM					Air Pressure PSI/BAR					GPH/ LPH					SCFM/ SLPM					Air Pressure PSI/BAR					GPH/ LPH					SCFM/ SLPM					Air Pressure PSI/BAR					GPH/ LPH					SCFM/ SLPM					Pressure		Width						Max. Depth in/cm																	
																																																													Air PSI/ BAR	Liquid PSI/BAR	A	cm	B	cm	C	cm																		
AD1010SS	6	0.4	3.0	11.5	1.4	41	14	1.0	4.0	15.1	2.3	66	22	1.5	4.6	17.6	3.2	90	26	1.8	5.7	21.4	3.5	98	38	2.6	6.9	26.0	4.7	133	12	0.8	10	0.7	9	23	14	36	16	41	36	91																																												
	8	0.6	2.7	10.1	1.8	50	18	1.2	3.3	12.4	2.9	82	26	1.8	4.1	15.4	3.7	105	32	2.2	4.9	18.6	4.3	121	54	3.7	5.3	20.1	6.6	188	22	1.5	20	1.4	11	28	13	33	16	41	42	107																																												
	10	0.7	2.2	8.3	2.1	59	20	1.4	2.9	11.0	3.2	91	30	2.1	3.4	12.9	4.3	122	38	2.6	4.2	15.7	5.1	144	62	4.3	4.6	17.3	7.8	221	34	2.3	30	2.1	8	20	12	30	16	41	45	114																																												
	12	0.8	1.8	6.9	2.4	69	22	1.5	2.3	8.9	3.6	101	34	2.3	2.8	10.4	5.0	140	46	3.2	2.7	10.3	6.3	180	70	4.8	3.1	11.9	9.1	258	46	3.2	40	2.8	9	23	12	30	15	38	48	122																																												

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



Model: AT1010SS

Material: Type 303 Stainless Steel



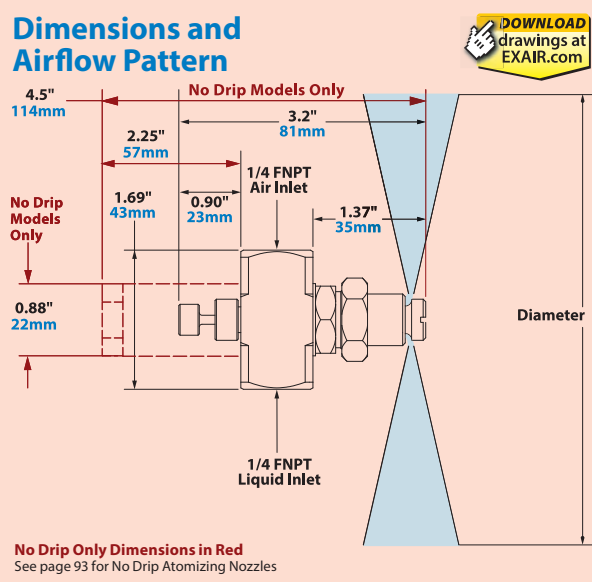
This 360° circular pattern nozzle can be used to coat inside diameters or cover a broad area over 4' (1219mm).

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



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

Air Atomizing Spray Nozzles



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

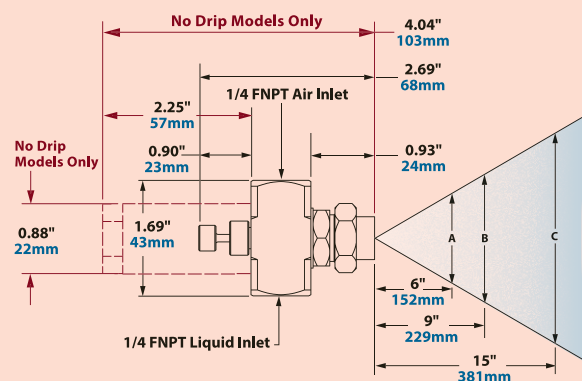
1/4 NPT external mix round pattern nozzles are great where a high volume of liquid is needed over a specific area or general area, but not in a flat pattern. Applications include spot treatments of parts, covering irregularly shaped objects or covering a container of parts with a heavy coat. They are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



No Drip Only Dimensions in Red
See page 93 for No Drip Atomizing Nozzles

Spray
Nozzles

Model	3 PSI/0.2 BAR Liquid				5 PSI/0.3 BAR Liquid				10 PSI/0.7 BAR Liquid				20 PSI/1.4 BAR Liquid				40 PSI/2.8 BAR Liquid				Spray Dimensions									
	Air Pressure PSI/BAR		GPH/ LPH		Air Pressure PSI/BAR		GPH/ LPH		Air Pressure PSI/BAR		GPH/ LPH		Air Pressure PSI/BAR		GPH/ LPH		Air Pressure PSI/BAR		GPH/ LPH		Air Pressure PSI/BAR		Air Pressure PSI/BAR		Liquid PSI/BAR		Width		Max. Depth	
	PSI	BAR	US	UK	PSI	BAR	US	UK	PSI	BAR	US	UK	PSI	BAR	US	UK	PSI	BAR	US	UK	PSI	BAR	PSI	BAR	PSI	BAR	A	B	C	feet/m
ER1010SS	5	0.3			0.9	25.5			10	0.7			1.3	36.8	20	1.4			1.9	53.8	20	1.4			1.9	53.8	10	0.7	3.0	2.7
	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	3.3	3.4
	20	1.4	1.0	3.8	1.9	53.8	30	2.1	40	2.8	1.9	7.2	3.0	85.0	60	4.1	2.7	10.2	4.1	116	60	4.1	3.8	14.4	4.1	116	40	2.8	3.5	4.0
	40	2.8			3.0	85.0	50	3.4	60	4.1			4.1	116	90	6.2			5.7	161	90	6.2			5.7	161	60	4.1	4.0	4.3
ER1020SS	6	0.4			0.9	25.5			10	0.7			1.3	36.8	20	1.4			2.9	82.1	40	2.8			3.0	85.0	10	0.7	3.8	3.0
	10	0.7			1.3	36.8			20	1.4			1.8	51.0	40	2.8			3.1	87.8	60	4.1			4.1	116	20	1.4	5.0	3.7
	30	2.1	2.5	9.5	2.4	68.0	40	2.8	3.1	87.8	40	2.8	4.3	16.3	60	4.1	5.9	22.3	4.1	116	80	5.5	7.5	28.4	5.3	150	40	2.8	4.3	4.6
	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	60	4.1	4.5	4.9
ER1030SS	10	0.7			4.0	113			10	0.7			4.9	139	30	2.1			7.7	218	40	2.8			9.5	269	10	0.7	4.5	4.9
	20	1.4			6.0	170			20	1.4			7.7	218	40	2.8			9.5	269	50	3.4			11.2	317	20	1.4	4.8	7.0
	40	2.8	4.4	16.7	9.5	269	40	2.8	9.5	269	50	3.4	11.2	317	60	4.1	11.0	41.6	11.7	331	60	4.1	14.0	53.0	11.7	331	40	2.8	4.5	7.3
	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	60	4.1	14.5	16.9
ER1040SS	15	1.0			4.9	139			20	1.4			7.7	218	30	2.1			9.5	269	50	3.4			11.2	317	10	0.7	5.3	9.1
	30	2.1			7.7	218			30	2.1			9.5	269	50	3.4			11.2	317	60	4.1			11.7	331	20	1.4	5.8	4.6
	40	2.8	10.0	37.9	9.5	269	40	2.8	9.5	269	60	4.1	11.7	331	80	5.5	27.6	104	11.7	331	70	4.8	31.0	117	13.4	379	40	2.8	6.0	5.8
	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	60	4.1	14.5	16.9
ER1050SS	40	2.8			14.0	396	55	3.8	18.0	510	65	4.5	21.0	595	80	5.5			25.3	716							40	2.8	4.5	9.1
	50	3.4			16.8	470	65	4.5	21.0	595	70	4.8	22.3	631	90	6.2			27.9	790							70	4.8	6.5	8.5
	60	4.1	18.0	68.1	19.7	558	70	4.8	22.3	631	80	5.5	25.3	716													80	5.5	6.5	9.1
	65	4.5			21.0	595	80	5.5	25.3	716	90	6.2	27.9	790													90	6.2	6.0	32

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



11510 Goldcoast Drive • Cincinnati, OH 45249-1621 • Phone (513) 671-3322
FAX (513) 671-3363 • E-mail: techhelp@exair.com • www.exair.com



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.

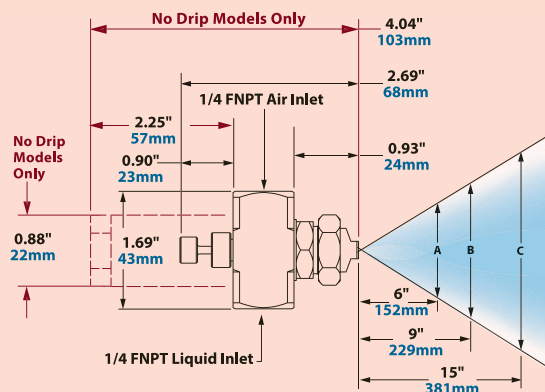
For pressure fed applications with independent air and liquid control.



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 93 for No Drip Atomizing Nozzles

3 PSI/0.2 BAR Liquid				5 PSI/0.3 BAR Liquid				10 PSI/0.7 BAR Liquid				20 PSI/1.4 BAR Liquid				40 PSI/2.8 BAR Liquid				Spray Dimensions																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
Model	Air Pressure PSI/ BAR	GPH/ LPH	SCFM/ SLPM	Air Pressure PSI/ BAR	GPH/ LPH	SCFM/ SLPM	Air Pressure PSI/ BAR	GPH/ LPH	SCFM/ SLPM	Air Pressure PSI/ BAR	GPH/ LPH	SCFM/ SLPM	Air Pressure PSI/ BAR	GPH/ LPH	SCFM/ SLPM	Pressure		Width						Max. Depth feet/m																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
																Air PSI/ BAR	Liquid PSI/ BAR	A		B		C																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
EF1010SS	5	0.3		0.8	22.7		10	0.7		1.0	28.3		15	1.0		1.3	36.8		25	1.7		1.8	51.0		45	3.1		2.7	76.5	5	0.3	3	0.2	4.0	10.2	5.8	14.7	9.5	24.1	6	1.8																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
	10	0.7	1.0	3.8	1.0	28.3	20	1.4	1.4	5.3	1.5	42.5	25	1.7	1.9	7.2	1.8	51.0	2.7	10.2	2.5	70.8	60	4.1	3.8	14.4	3.4	96.3	25	1.7	5	0.3	5.5	14.0	8.0	20.3	10.0	25.4	12	3.7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
	20	1.4			1.5	42.5	30	2.1			2.0	56.6	40	2.8			2.5	70.8			60	4.1			3.4	96.3	4.1	116	25	1.7	20	1.4	6.5	16.5	9.5	24.1	13.0	33.0	13	4.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		

Air Atomizing Spray Nozzles



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

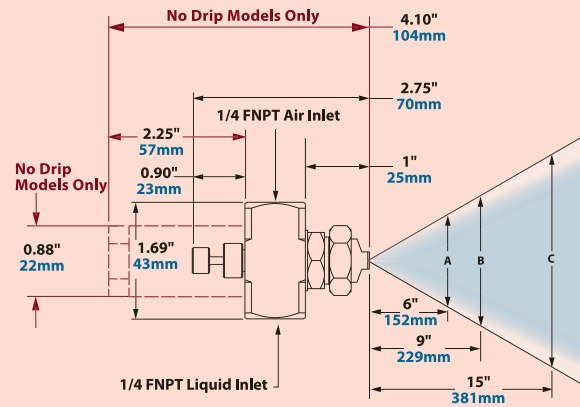
1/4 NPT external mix wide angle flat fan pattern nozzles are great where a high volume of liquid is needed over a wide area such as a conveyor line. Because they are external mix, airflow and liquid flow can be controlled independently. Common applications are those which require a moderate application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



No Drip Only Dimensions in Red
See page 93 for No Drip Atomizing Nozzles

Spray
Nozzles

3 PSI/0.2 BAR Liquid				5 PSI/0.3 BAR Liquid				10 PSI/0.7 BAR Liquid				20 PSI/1.4 BAR Liquid				40 PSI/2.8 BAR Liquid				Spray Dimensions																						
Model	Air Pressure PSI/ BAR		GPH/ LPH	SCFM/ SLPM		Air Pressure PSI/ BAR		GPH/ LPH	SCFM/ SLPM		Air Pressure PSI/ BAR		GPH/ LPH	SCFM/ SLPM		Air Pressure PSI/ BAR		GPH/ LPH	SCFM/ SLPM		Pressure		Width						Max. Depth feet/m													
																					Air PSI/ BAR	Liquid PSI/ BAR	A		B		C															
EB1010SS	5	0.3	1.0	3.8	0.9	25.5	5	0.3	1.4	5.3	0.9	25.5	8	0.6	1.9	7.2	1.1	31.1	10	0.7	2.7	10.2	1.3	36.8	15	1.0	3.8	14.4	1.7	48.1	10	0.7	5	0.3	8.0	20.3	11.0	27.9	14.0	35.6	9	2.7
	8	0.6			1.1	31.1	10	0.7			1.3	36.8	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												
	25	1.7			2.6	73.6	30	2.1			2.6	73.6	35	2.4			3.0	85.0	40	2.8			3.8	101.1	40	2.8			3.8	101.1												
EB1020SS	6	0.4	2.5	9.5	1.0	28.3	6	0.4	3.2	12.1	1.0	28.3	6	0.4	4.3	16.3	1.0	28.3	10	0.7	5.9	22.3	1.3	36.8	20	1.4	7.5	28.4	2.0	56.6	8	0.6	5	0.3	11.0	27.9	16.0	40.6	19.0	48.3	8	2.4
	7	0.5			1.1	31.1	8	0.6			1.1	31.1	8	0.6			1.1	31.1	12	0.8			1.5	42.5	25	1.7			2.3	65.1												
	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												
	25	1.7			2.6	73.6	30	2.1			2.6	73.6	35	2.4			3.0	85.0	40	2.8			3.8	101.1	40	2.8			3.8	101.1												
EB1030SS	8	0.6	4.4	16.7	3.4	96.3	10	0.7	5.5	20.8	3.8	108	15	1.0	7.6	28.8	4.8	136	35	2.4	11.0	41.6	8.4	238	50	3.4	14.0	53.0	11.0	311	15	1.0	3	0.2	11.0	27.9	17.0	43.2	21.0	53.3	13	4.0
	15	1.0			4.8	136	20	1.4			5.9	167	25	1.7			6.7	190	45	3.1			10.1	286	65	4.5			12.3	348												
	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												
	70	4.8			40	2.8	14.0	35.6			18.0	45.7	24.0	61.0			30	9.1																								
EB1040SS	10	0.7	10.0	37.9	3.8	108	15	1.0	13.5	51.1	4.8	136	25	1.7	18.8	71.2	6.7	190	45	3.1	27.6	104	10.1	286	75	5.2	31.0	117	13.7	388	30	2.1	5	0.3	13.0	33.0	19.0	48.3	24.0	61.0	17	5.2
	15	1.0			4.8	136	20	1.4			5.9	167	30	2.1			7.6	215	50	3.4			11.0	311	85	5.9			15.7	445												
	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												
	80	5.5			20	1.4	15.0	38.1			22.0	55.9	28.0	71.1			26	7.9																								

Siphon Fed Round Pattern - 1/4 NPT



Model: SR1010SS

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

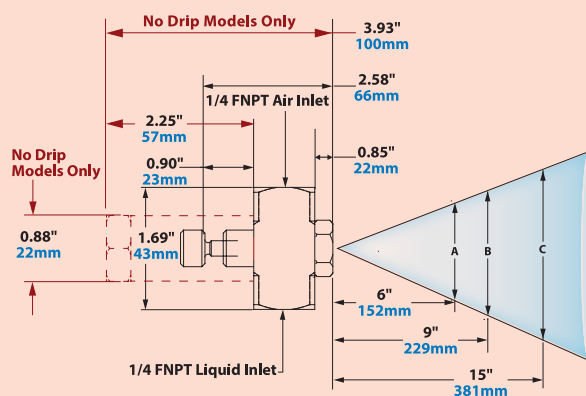
1/4 NPT siphon fed round pattern nozzles are great where no liquid pressure is available and a thin coating is needed at a specific area. Flow rate is adjustable via the adjusting valve. Siphon nozzles work best with a suction height of 36" (914mm) or less. Since these nozzles are siphon fed, the compressed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

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

Air Atomizing Spray Nozzles



Siphon Fed Flat Fan Pattern - 1/4 NPT



Model: SF1010SS

Material: Type 303 Stainless Steel

Model: SF1020SS

Material: Type 303 Stainless Steel

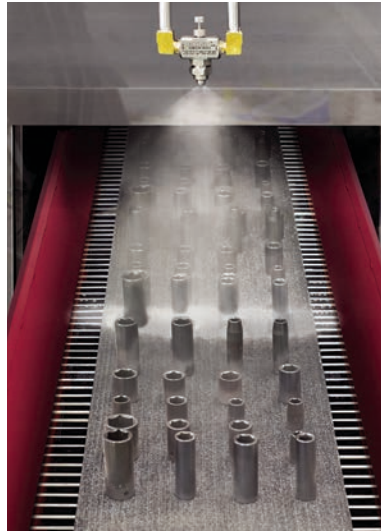
Model: SF1030SS

Material: Type 303 Stainless Steel

Model SF1010SS, SF1020SS and SF1030SS

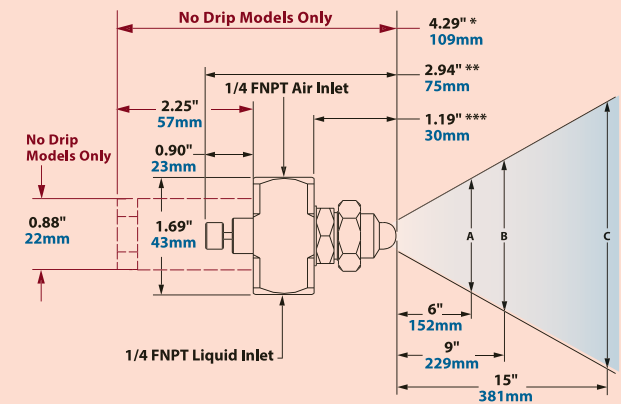
1/4 NPT siphon fed flat fan pattern nozzles are great where no liquid pressure is available and a thin coating is needed over a wide band. Flow rate is adjustable via the adjusting valve. Siphon nozzles work best with a suction height of 36" (914mm) or less. Since these nozzles are siphon fed, the compressed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



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

No Drip Only Dimensions in Red
See page 93 for No Drip Atomizing Nozzles

Spray
Nozzles

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

Internal Mix Narrow Angle Round Pattern - 1/2 NPT



Model: AN5010SS

Material: Type 303 Stainless Steel

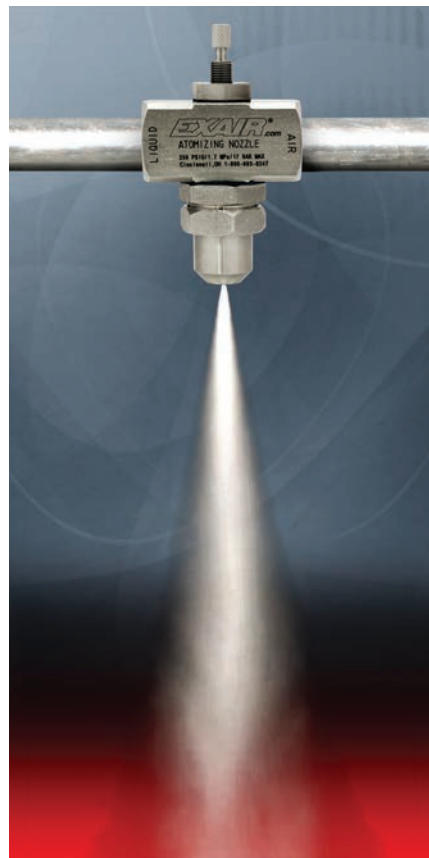
Model: AN5020SS

Material: Type 303 Stainless Steel

Model AN5010SS and AN5020SS

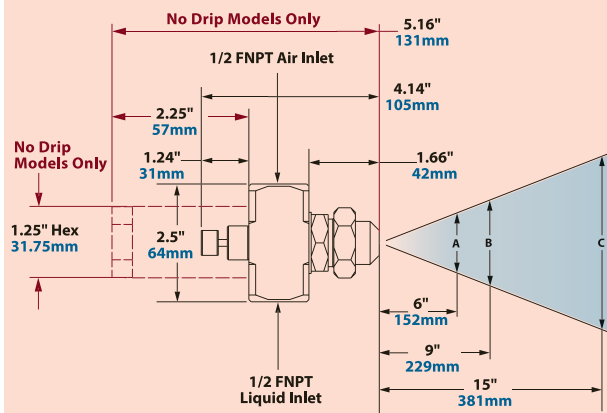
1/2 NPT internal mix narrow angle round pattern nozzles are excellent for spraying a concentrated mist of liquid. Because of the versatility of their adjustments, these larger atomizing nozzles can apply a heavy coat up close or send a very fine mist over 40 feet away! They are often used for higher 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.

Dimensions and Airflow Pattern



No Drip Only Dimensions in Red
See page 93 for No Drip Atomizing Nozzles

Spray Dimensions												
Model	Pressure				Width						Max. Depth feet/m	
	Air PSI/ BAR		Liquid PSI/BAR		A		B		C			
					in	cm	in	cm	in	cm		
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

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

Air Atomizing Spray Nozzles



Internal Mix Wide Angle Round Pattern - 1/2 NPT



Model: AW5010SS

Material: Type 303 Stainless Steel

Model: AW5020SS

Material: Type 303 Stainless Steel

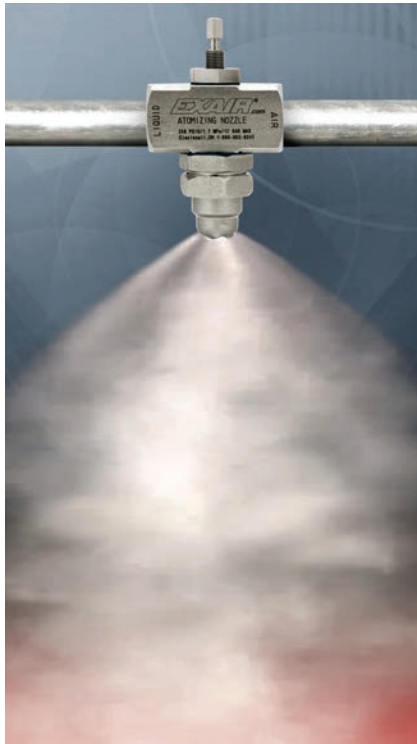
Model: AW5030SS

Material: Type 303 Stainless Steel

Model AW5010SS, AW5020SS and AW5030SS

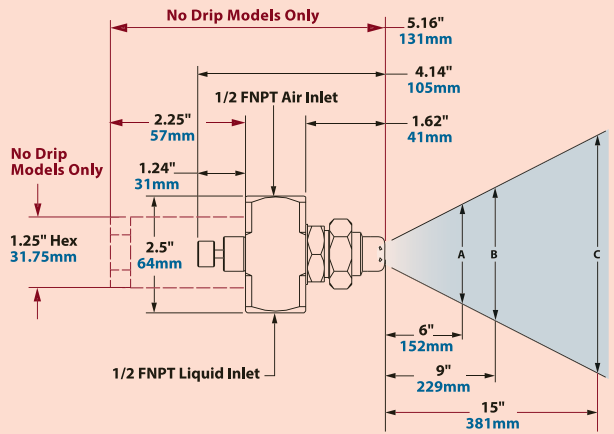
EXAIR's 1/2 NPT internal mix wide angle round pattern atomizing nozzles are great for covering a broad area. These larger atomizing nozzles can be adjusted for a light mist or a heavy soaking spray. They are popular for dust mitigation, humidification, and cooling of products, people or livestock in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



No Drip Only Dimensions in Red
See page 93 for No Drip Atomizing Nozzles

Spray
Nozzles

5 PSI/0.3 BAR Liquid								15 PSI/1.0 BAR Liquid								25 PSI/1.7 BAR Liquid								35 PSI/2.4 BAR Liquid								55 PSI/3.8 BAR Liquid								Spray Dimensions											
Model	Air Pressure PSI/BAR		GPH/ LPH		SCFM/ SLPM			Air Pressure PSI/BAR		GPH/ LPH		SCFM/ SLPM			Air Pressure PSI/BAR		GPH/ LPH		SCFM/ SLPM			Air Pressure PSI/BAR		GPH/ LPH		SCFM/ SLPM			Air Pressure PSI/BAR		GPH/ LPH		SCFM/ SLPM		Pressure		Width						Max. Depth feet/m								
	Air PSI/ BAR	Air PSI/ BAR	GPH/ LPH	GPH/ LPH	SCFM/ SLPM	SCFM/ SLPM		Air PSI/ BAR	Air PSI/ BAR	GPH/ LPH	GPH/ LPH	SCFM/ SLPM	SCFM/ SLPM		Air PSI/ BAR	Air PSI/ BAR	GPH/ LPH	GPH/ LPH	SCFM/ SLPM	SCFM/ SLPM		Air PSI/ BAR	Air PSI/ BAR	GPH/ LPH	GPH/ LPH	SCFM/ SLPM	SCFM/ SLPM		Air PSI/ BAR	Air PSI/ BAR	GPH/ LPH	GPH/ LPH	SCFM/ SLPM	SCFM/ SLPM	A	B	C														
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

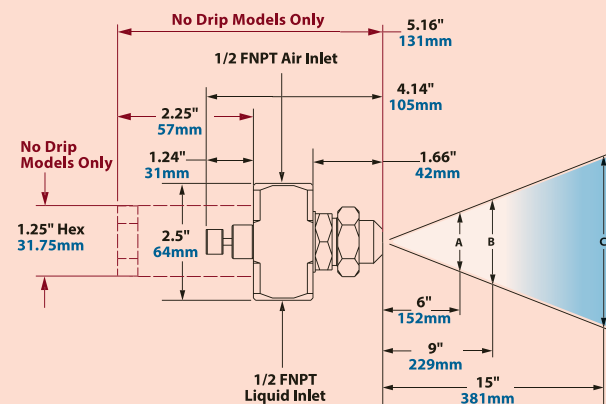
1/2 NPT internal mix flat fan pattern atomizing nozzles are designed with efficiency in mind. Especially good for vertical or horizontal assembly lines, the broad thin pattern of these larger atomizing nozzles makes efficient use of your expensive liquids. Their output can be adjusted for a very light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

Dimensions and Airflow Pattern



No Drip Only Dimensions in Red
See page 93 for No Drip Atomizing Nozzles

Need Help Choosing The Best Atomizing Nozzle For Your Application?

Not sure which atomizing nozzle is required?

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

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

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

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

Air Atomizing Spray Nozzles

An INTELLIGENT
COMPRESSED AIR®
Product

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



Model: AT5010SS

Material: Type 303 Stainless Steel

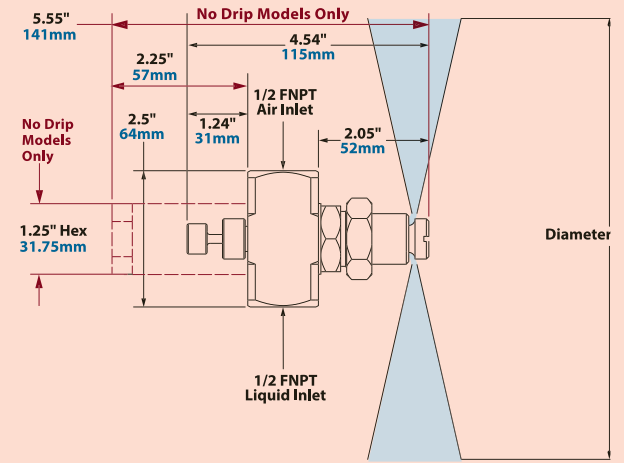
Model AT5010SS

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.

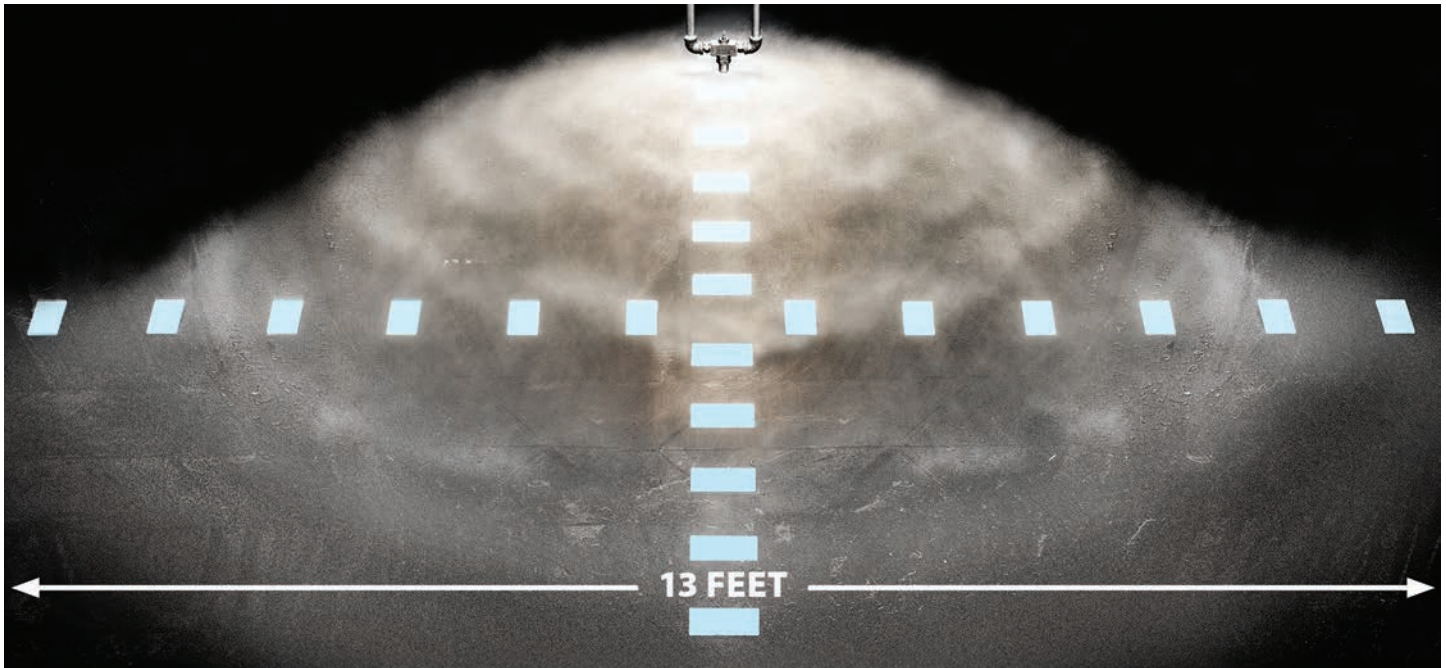
For pressure fed applications not requiring independent air and liquid control.

Dimensions and Airflow Pattern

DOWNLOAD
drawings at
EXAIR.com



No Drip Only Dimensions in Red
See page 93 for No Drip Atomizing Nozzles



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

10 PSI/0.7 BAR Liquid								20 PSI/1.4 BAR Liquid						30 PSI/2.1 BAR Liquid						40 PSI/2.8 BAR Liquid						60 PSI/4.1 BAR Liquid						Spray Dimensions					
Model	Air Pressure PSI/BAR		GPH/LPH		SCFM/ SLPM		Air Pressure PSI/BAR		GPH/LPH		SCFM/ SLPM		Air Pressure PSI/BAR		GPH/LPH		SCFM/ SLPM		Air Pressure PSI/BAR		GPH/LPH		SCFM/ SLPM		Air Pressure PSI/BAR		GPH/LPH		SCFM/ SLPM		Pressure		Diameter				
																															Air PSI/BAR	Liquid PSI/BAR	in	cm			
AT5010SS	14	1.0	54	204	13.7	388	24	1.7	100	379	17.3	490	36	2.5	114	431	23.7	671	48	3.3	132	500	29.6	838	72	5.0	150	568	41.5	1175	16	1.1	10	0.7	56	142	AT5010SS
	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	



11510 Goldcoast Drive • Cincinnati, OH 45249-1621 • Phone (513) 671-3322
FAX (513) 671-3363 • E-mail: techhelp@exair.com • www.exair.com

Order Direct
We Ship From Stock

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



Model: EF5010SS

Material: Type 303 Stainless Steel

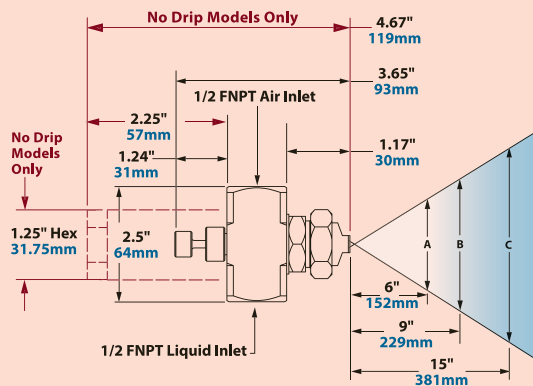
Model EF5010SS

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.

Dimensions and Airflow Pattern

DOWNLOAD
drawings at
EXAIR.com



No Drip Only Dimensions in Red
See page 93 for No Drip Atomizing Nozzles



See our Terms & Conditions



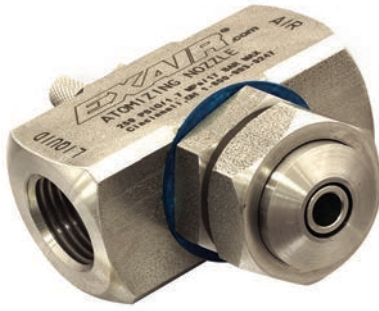
External mix narrow angle flat fan nozzles provide a high volume of liquid in a concentrated area.

3 PSI/0.2 BAR Liquid						5 PSI/0.3 BAR Liquid						7 PSI/0.5 BAR Liquid						10 PSI/0.7 BAR Liquid						15 PSI/1.0 BAR Liquid						Spray Dimensions													
Model	Air Pressure PSI/ BAR		GPH/ LPH	SCFM/ SLPM		Air Pressure PSI/ BAR		GPH/ LPH	SCFM/ SLPM		Air Pressure PSI/ BAR		GPH/ LPH	SCFM/ SLPM		Air Pressure PSI/ BAR		GPH/ LPH	SCFM/ SLPM		Pressure		Width						Max. Depth feet/m														
																					Air PSI/ BAR	Liquid PSI/ BAR	A		B		C																
in	cm	in	cm	in	cm																																						
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	3	0.2	15	38	18.5	47	22	56	25	7.6	EF5010SS
	35	2.4			34.0	961	45	3.1			40.4	1144	55	3.8			47.0	1331	60	4.1			49.75	1409	85	5.9			60.0	1699	50	3.4	5	0.3	15	38	19	48	23	58	31	9.4	
	40	2.8			37.3	1055	55	3.8			47.4	1342	60	4.1			49.5	1402	70	4.8			52.84	1496	90	6.2			61.4	1739	70	4.8	10	0.7	15	38	20	51	25	64	33	10.1	
	45	3.1			40.8	1155	60	4.1			50.0	1416	70	4.8			56.8	1609	80	5.5			59.7	1691	100	6.9			67.6	1914	90	6.2	15	1.0	15	38	20	51	25	64	35	10.7	

Air Atomizing Spray Nozzles



Siphon Fed Round Pattern - 1/2 NPT



Model: SR5010SS

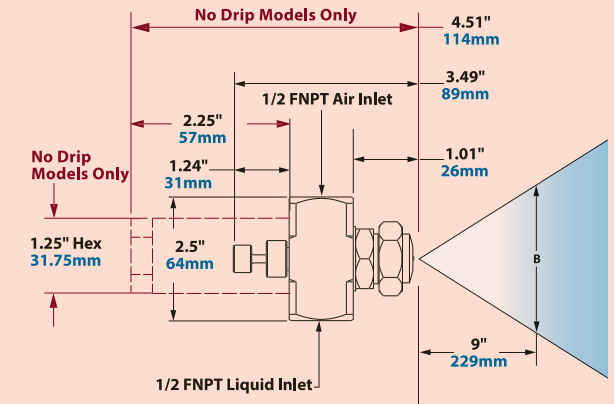
Material: Type 303 Stainless Steel

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. 1/2 NPT 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.

Dimensions and Airflow Pattern



No Drip Only Dimensions in Red
See page 93 for No Drip Atomizing Nozzles

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!



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

Liquid Flow in GPH/LPH															Spray Dimensions at 8" (20cm) Siphon Height									
Model	Air			Gravity Head					Siphon Height							Air		Width		Max. Depth feet/m				
	Pressure PSI/BAR	SCFM/ SLPM		18"	46cm	12"	30cm	6"	15cm	4"	10cm	8"	20cm	12"	30cm	24"	61cm	Pressure PSI/BAR	B					
																		in	cm					
SR5010SS	20	1.4	19.3	547	---	---	---	---	---	---	---	---	---	---	---	---	---	20	1.4	6	15	22	6.7	
	30	2.1	25.2	714	---	---	---	---	---	---	---	---	---	---	---	---	---	30	2.1			25	7.6	
	40	2.8	32.8	929	---	---	56.8	215	41	155	31.5	119	28.4	107	19.6	74	---	---	40			2.8	28	8.5
	50	3.4	36.7	1039	61	231	57.4	217	42.8	162	32.1	121	30.2	114	21.8	83	---	---	50			3.4	29	8.8
	60	4.1	42.2	1195	59.1	224	57.4	217	43.8	166	33.1	125	33	125	25.7	97	9.9	37	60			4.1	31	9.4
	70	4.8	47.7	1351	66	250	58.6	222	44.8	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.



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 Air Atomizing Spray Nozzles



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



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 ATOMIZING NOZZLES

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

Spray Nozzles



NO DRIP INTERNAL MIX ATOMIZING NOZZLES

Model Description

No Drip Internal Mix Flat Fan Pattern Atomizing Nozzles

AF9010SS	No Drip Internal Mix Flat Fan Pattern Atomizing Nozzles, 3.47 GPH/13.12 LPH Max, 1/8 NPT
AF9020SS	No Drip Internal Mix Flat Fan Pattern Atomizing Nozzles, 4.27 GPH/16.15 LPH Max, 1/8 NPT
AF9030SS	No Drip Internal Mix Flat Fan Pattern Atomizing Nozzles, 17.00 GPH/64.35 LPH Max, 1/8 NPT
AF9040SS	No Drip Internal Mix Flat Fan Pattern Atomizing Nozzles, 28.00 GPH/105.99 LPH Max, 1/8 NPT
AF2010SS	No Drip Internal Mix Flat Fan Pattern Atomizing Nozzles, 3.2 GPH/12.1 LPH Max, 1/4 NPT
AF2020SS	No Drip Internal Mix Flat Fan Pattern Atomizing Nozzles, 4.7 GPH/17.8 LPH Max, 1/4 NPT
AF2030SS	No Drip Internal Mix Flat Fan Pattern Atomizing Nozzles, 11.0 GPH/41.6 LPH Max, 1/4 NPT
AF2040SS	No Drip Internal Mix Flat Fan Pattern Atomizing Nozzles, 18.3 GPH/69.3 LPH Max, 1/4 NPT
AF2050SS	No Drip Internal Mix Flat Fan Pattern Atomizing Nozzles, 42.0 GPH/159 LPH Max, 1/4 NPT
AF6010SS	No Drip Internal Mix Flat Fan Pattern Atomizing Nozzles, 46.2 GPH/175 LPH Max, 1/2 NPT
AF6020SS	No Drip Internal Mix Flat Fan Pattern Atomizing Nozzles, 231.0 GPH/874 LPH Max, 1/2 NPT

No Drip Internal Mix Deflected Flat Fan Pattern Atomizing Nozzles

AD2010SS	No Drip Internal Mix Deflected Flat Fan Pattern Atomizing Nozzles, 6.9 GPH/26 LPH Max, 1/4 NPT
-----------------	--

No Drip Internal Mix 360° Hollow Circular Pattern Atomizing Nozzles

AT2010SS	No Drip Internal Mix 360° Hollow Circular Pattern Atomizing Nozzles, 14.7 GPH/55.7 LPH Max, 1/4 NPT
AT6010SS	No Drip Internal Mix 360° Hollow Circular Pattern Atomizing Nozzles, 150 GPH/568 LPH Max, 1/2 NPT

No Drip Air Atomizing Spray Nozzles



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



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 EXTERNAL MIX ATOMIZING NOZZLES

Spray Nozzles

No Drip Air Atomizing Spray Nozzles

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

Spray
Nozzles



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



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 more 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).



Applications

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

Advantages

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

Liquid Atomizing Spray Nozzles

OmniStream™ Cone Nozzles - 1/4 NPT



Model: FL1008SS

Material: Type 303 Stainless Steel

Model: FL1010SS

Material: Type 303 Stainless Steel

Model: FL1011SS

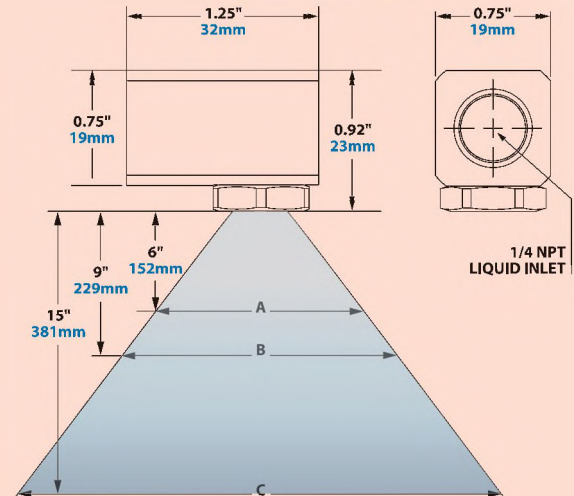
Material: Type 303 Stainless Steel

Model FL1008SS, FL1010SS and FL1011SS

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

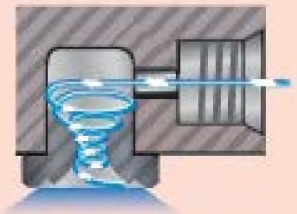


Dimensions and Spray Pattern



How OmniStream and HollowStream Cone Nozzles Work

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



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

For maximum liquid conservation and spray control visit Air Atomizing Nozzles on page 70.

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

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

Liquid Atomizing Spray Nozzles

OmniStream™ 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

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

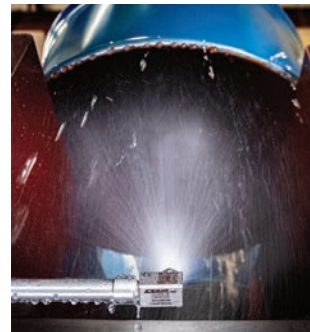
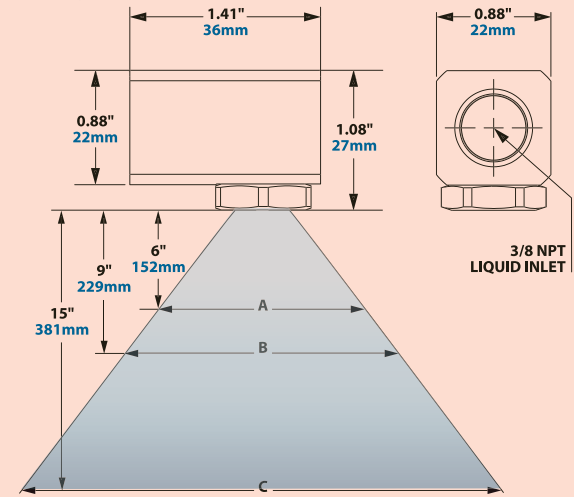
For maximum liquid conservation and spray control visit Air Atomizing Nozzles on page 70.

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

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

Dimensions and Spray Pattern

DOWNLOAD drawings at EXAIR.com



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

OmniStream Cone Nozzles											Spray Angle										
Inlet Connection	Model	Capacity	Max Free Passage	Flow Rate GPM/LPM							Inlet		Width								
					3 PSI	5 PSI	7 PSI	10 PSI	20 PSI	40 PSI			60 PSI	Pressure PSI/BAR	A		B		C		
3/8 NPT	FL3011SS	11	0.128"	GPM	0.57	0.76	0.91	1.10	1.52	2.20	2.70	7	0.5	8.1	21	12.1	31	20.2	51	FL3011SS	
				LPM	2.16	2.88	3.44	4.16	5.75	8.33	10.22	20	1.4	9.9	25	14.8	38	24.7	63		
	FL3013SS	13	0.144"	GPM	0.75	0.95	1.13	1.30	1.86	2.60	3.34	7	0.5	7.6	19	11.5	29	19.1	49	FL3013SS	
				LPM	2.84	3.60	4.28	4.92	7.04	9.84	12.64	20	1.4	9.0	23	13.6	35	22.6	57		
	FL3016SS	16	0.154"	GPM	0.98	1.10	1.25	1.60	2.23	2.90	3.60	7	0.5	7.6	19	11.5	29	19.1	49	FL3016SS	
				LPM	3.71	4.16	4.73	6.06	8.44	10.98	13.63	20	1.4	9.7	25	14.6	37	24.3	62		
	FL3020SS	20	0.172"	GPM	1.22	1.64	1.88	2.00	2.98	4.24	4.82	7	0.5	8.4	21	12.6	32	21.0	53	FL3020SS	
				LPM	4.62	6.21	7.12	7.57	11.28	16.05	18.24	20	1.4	9.9	25	14.8	38	24.7	63		
	FL3023SS	23	0.189"	GPM	1.36	1.76	1.96	2.30	3.18	4.56	5.38	7	0.5	9.0	23	13.6	35	22.6	57	FL3023SS	
				LPM	5.15	6.66	7.42	8.71	12.04	17.26	20.36	20	1.4	10.2	26	15.4	39	25.6	65		
	FL3026SS	26	0.204"	GPM	1.26	1.80	2.02	2.60	3.30	5.18	6.12	7	0.5	9.7	25	14.6	37	24.3	62	FL3026SS	
				LPM	4.77	6.81	7.65	9.84	12.49	19.61	23.17	20	1.4	10.8	27	16.2	41	27.0	69		
	FL3029SS	29	0.221"	GPM	1.30	1.84	2.28	2.90	3.62	5.48	6.48	7	0.5	9.9	25	14.8	38	24.7	63	FL3029SS	
				LPM	4.92	6.97	8.63	10.98	13.70	20.74	24.53	20	1.4	10.8	27	16.2	41	27.0	69		
													60	4.1	12.0	30	18.0	46	30.0	76	

Liquid Atomizing Spray Nozzles

OmniStream™ Cone Nozzles - 1/2 NPT



Model: FL5032SS

Material: Type 303 Stainless Steel

Model: FL5040SS

Material: Type 303 Stainless Steel

Model: FL5048SS

Material: Type 303 Stainless Steel

Model: FL5056SS

Material: Type 303 Stainless Steel

Model: FL5064SS

Material: Type 303 Stainless Steel

Model: FL5072SS

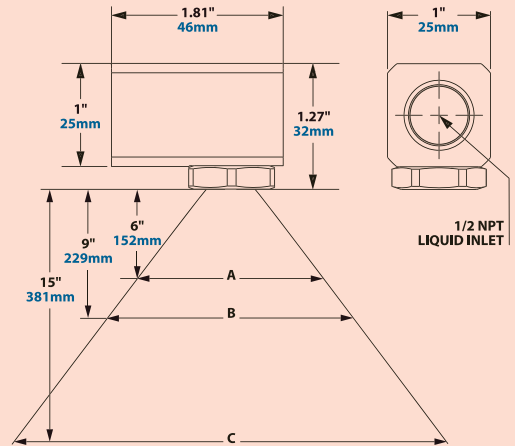
Material: Type 303 Stainless Steel

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

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

Dimensions Spray Pattern

DOWNLOAD drawings at EXAIR.com



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



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

For maximum liquid conservation and spray control visit Air Atomizing Nozzles on page 70.

OmniStream Cone Nozzles										Spray Angle							
Inlet Connection	Model	Capacity	Max Free Passage	Flow Rate GPM/LPM						Inlet		Width					
										Pressure PSI/BAR		A		B		C	
					3 PSI	5 PSI	7 PSI	10 PSI	20 PSI	40 PSI	60 PSI	in	cm	in	cm	in	cm
1/2 NPT	FL5032SS	32	0.201"	GPM	1.74	2.46	2.80	3.20	4.46	6.28	7.30	7	0.5	9.4	23.9	14.1	35.81
				LPM	6.59	9.31	10.60	12.11	16.88	23.77	27.63	20	1.4	10.1	25.7	15.1	38.3
												60	4.1	12.0	30.5	18.0	45.7
	FL5040SS	40	0.242"	GPM	2.68	3.14	3.52	4.00	5.60	7.80	8.76	7	0.5	10.1	25.7	15.1	38.4
				LPM	10.14	11.89	13.32	15.14	21.20	29.53	33.16	20	1.4	12.0	30.5	18.0	45.7
												60	4.1	13.1	33.3	19.6	49.8
	FL5048SS	48	0.281"	GPM	3.06	3.56	3.96	4.80	6.81	9.58	11.73	7	0.5	10.1	25.7	15.1	38.4
				LPM	11.28	13.48	15.00	18.17	25.78	39.26	44.40	20	1.4	12.0	30.5	18.0	45.7
												60	4.1	13.1	33.3	19.6	49.8
	FL5056SS	56	0.295"	GPM	3.32	4.18	4.67	5.60	7.89	11.22	13.74	7	0.5	11.0	28.0	16.5	42.0
				LPM	12.57	15.82	17.68	21.20	29.87	42.47	52.01	20	1.4	12.0	30.5	18.0	45.7
												60	4.1	13.1	33.3	19.6	49.8
	FL5064SS	64	0.328"	GPM	3.50	4.50	5.15	6.40	9.13	12.70	15.81	7	0.5	11.0	28.0	16.5	42.0
				LPM	13.25	17.03	19.49	24.23	34.56	48.07	59.85	20	1.4	12.0	30.5	18.0	45.7
												60	4.1	13.1	33.3	19.6	49.8
	FL5072SS	72	0.359"	GPM	4.08	5.00	6.17	7.20	10.17	14.40	17.64	7	0.5	11.0	28.0	16.5	42.0
				LPM	15.44	18.93	23.36	27.25	38.50	54.51	66.77	20	1.4	12.0	30.5	18.0	45.7
												60	4.1	13.1	33.3	19.6	49.8

Liquid Atomizing Spray Nozzles

HollowStream™ Cone Nozzles – 1/8 NPT



Model: HL80X5SS

Material: Type 303 Stainless Steel

Model: HL8001SS

Material: Type 303 Stainless Steel

Model: HL8002SS

Material: Type 303 Stainless Steel

Model: HL8003SS

Material: Type 303 Stainless Steel

Model: HL8005SS

Material: Type 303 Stainless Steel

Model: HL8008SS

Material: Type 303 Stainless Steel

Model: HL8010SS

Material: Type 303 Stainless Steel

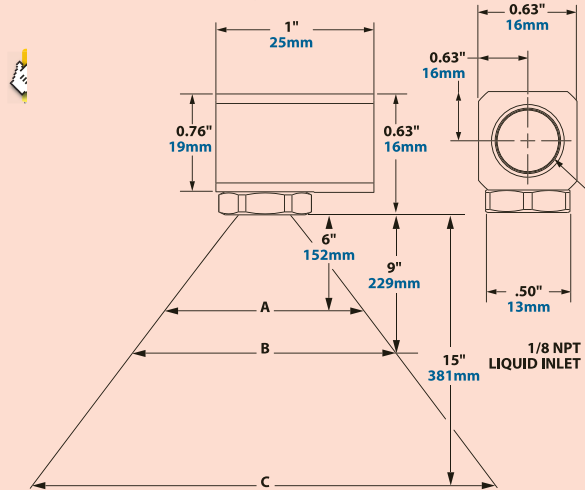
Compared to EXAIR's Air Atomizing Spray Nozzles the HollowStream will have higher liquid flow rates.

For maximum liquid conservation and spray control visit Air Atomizing Nozzles on page 70.

Model HL80X5SS, HL8001SS, HL8002SS, HL8003SS, HL8005SS, HL8008SS and HL8010SS

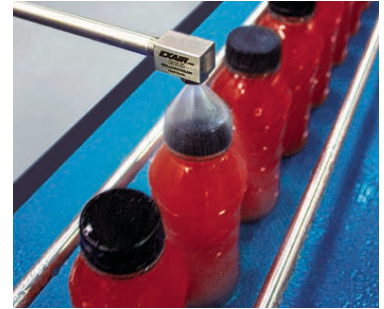
EXAIR's 1/8 NPT HollowStream™ Cone Nozzles, with a circular ring spray pattern, are among the most common type of spray nozzles. Hollow cone spray nozzles are applied to solve cooling, cleaning, washing, rinsing and dust suppression applications throughout industry with less liquid than their full cone counterparts. Their design is vaneless, which creates wide open internal features to resist clogging and can work well with liquids containing particulate. They produce a uniform distribution in a hollow cone ring pattern. Their right-angle design is compact and operates up to 250 PSI liquid pressure. They are commonly used with liquids like water, rinse aids or detergents but are also effective with chemicals, pesticides and herbicides. Adjustment of the liquid flow rate is done by varying liquid pressure.

Dimensions Spray Pattern



See page 98 for How the OmniStream and HollowStream Cone Nozzles Work.

HollowStream Nozzles rinse off bottles as part of a filling and packaging operation.



HollowStream Cone Nozzles											Spray Dimensions										
Inlet Connection	Model	Capacity	Max Free Passage	Flow Rate GPM/LPM								Inlet		Spray Angle	Width						
					3 PSI	5 PSI	7 PSI	10 PSI	20 PSI	40 PSI	60 PSI				Pressure PSI/BAR	Degrees	A		B		
														in	cm	in	cm	in	cm		
1/8 NPT	HL80X5SS	5	0.035"	GPM	0.033	0.040	0.046	0.050	0.072	0.100	0.156	7	0.5	X	X	X	X	X	X	X	HL80X5SS
				LPM	0.125	0.151	0.174	0.189	0.273	0.379	0.591	20	1.4	20	0.4	0.9	1.1	2.7	2.1	5.4	
												60	4.1	55	1.0	2.6	3.1	7.9	6.2	15.9	
	HL8001SS	1	0.063"	GPM	0.067	0.083	0.094	0.100	0.153	0.206	0.239	7	0.5	23	X	X	X	X	X	X	HL8001SS
				LPM	0.254	0.314	0.356	0.379	0.579	0.780	0.905	20	1.4	50	0.9	2.4	2.8	7.1	5.6	14.2	
												60	4.1	60	1.2	2.9	3.5	8.8	6.9	17.6	
	HL8002SS	2	0.078"	GPM	0.12	0.15	0.18	0.20	0.25	0.35	0.42	7	0.5	50	0.9	2.4	2.8	7.1	5.6	14.2	HL8002SS
				LPM	0.44	0.57	0.66	0.76	0.93	1.31	1.60	20	1.4	53	1.0	2.5	3.0	7.6	6.0	15.2	
												60	4.1	60	1.2	2.9	3.5	8.8	6.9	17.6	
	HL8003SS	3	0.094"	GPM	0.20	0.22	0.26	0.30	0.43	0.61	0.75	7	0.5	50	0.9	2.4	2.8	7.1	5.6	14.2	HL8003SS
				LPM	0.76	0.82	0.98	1.14	1.62	2.32	2.84	20	1.4	53	1.0	2.5	3.0	7.6	6.0	15.2	
												60	4.1	60	1.2	2.9	3.5	8.8	6.9	17.6	
	HL8005SS	5	0.125"	GPM	0.25	0.33	0.39	0.48	0.67	0.95	1.18	7	0.5	40	0.7	1.8	2.2	5.5	4.4	11.1	HL8005SS
				LPM	0.95	1.25	1.49	1.82	2.54	3.61	4.46	20	1.4	57	1.1	2.8	3.3	8.3	6.5	16.5	
												60	4.1	70	1.4	3.6	4.2	10.7	8.4	21.3	
	HL8008SS	8	0.156"	GPM	0.45	0.55	0.67	0.80	1.18	1.62	1.90	7	0.5	53	1.0	2.5	3.0	7.6	6.0	15.2	HL8008SS
				LPM	1.70	2.08	2.54	3.03	4.47	6.13	7.19	20	1.4	60	1.2	2.9	3.5	8.8	6.9	17.6	
												60	4.1	62	1.2	3.1	3.6	9.2	7.2	18.3	
	HL8010SS	10	0.159"	GPM	0.48	0.64	0.79	0.96	1.31	1.85	2.10	7	0.5	60	1.2	2.9	3.5	8.8	6.9	17.6	HL8010SS
				LPM	1.82	2.42	2.99	3.63	4.96	7.00	7.95	20	1.4	65	1.3	3.2	3.8	9.7	7.6	19.4	
												60	4.1	70	1.4	3.6	4.2	10.7	8.4	21.3	

Liquid Atomizing Spray Nozzles

HollowStream™ Cone Nozzles – 1/4 NPT



Model: HL1001SS

Material: Type 303 Stainless Steel

Model: HL1002SS

Material: Type 303 Stainless Steel

Model: HL1003SS

Material: Type 303 Stainless Steel

Model: HL1005SS

Material: Type 303 Stainless Steel

Model: HL1008SS

Material: Type 303 Stainless Steel

Model: HL1011SS

Material: Type 303 Stainless Steel

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

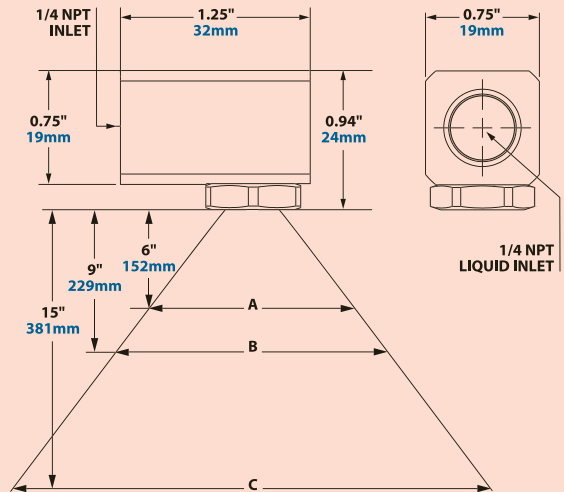
EXAIR's 1/4 NPT HollowStream Cone Nozzles produce a ring of liquid upon your target and are among the most common type of spray nozzles. Hollow cone spray nozzles generally use less liquid than full cone spray nozzles. These nozzles will be used when cooling, cleaning, washing, rinsing and dust suppression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

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

For maximum liquid conservation and spray control visit Air Atomizing Nozzles on page 70.

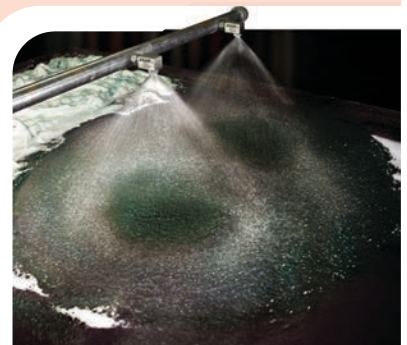


Dimensions and Spray Pattern



See page 98 for How the OmniStream and HollowStream Cone Nozzles Work.

HollowStream Nozzles break and remove foam from a washing basin.



HollowStream Cone Nozzles											Spray Angle									
Inlet Connection	Model	Capacity	Max Free Passage	Flow Rate GPM/LPM							Inlet		Width							
					3 PSI	5 PSI	7 PSI	10 PSI	20 PSI	40 PSI			60 PSI	Pressure PSI/BAR	A		B			C
1/4 NPT	HL1001SS	1	0.052"	GPM	0.06	0.07	0.09	0.10	0.13	0.18	0.21	7	0.5	4.8	12.3	6.1	15.5	7.8	19.8	HL1001SS
				LPM	0.23	0.26	0.34	0.38	0.49	0.68	0.79	20	1.4	7.3	18.5	9.2	23.3	11.7	29.7	
	HL1002SS	2	0.086"	GPM	0.14	0.17	0.19	0.20	0.27	0.38	0.46	7	0.5	6.1	15.5	8.6	21.7	11.2	28.4	HL1002SS
				LPM	0.53	0.64	0.72	0.76	1.02	1.44	1.74	20	1.4	9.2	23.3	12.8	32.6	16.8	42.6	
	HL1003SS	3	0.109"	GPM	0.20	0.24	0.28	0.32	0.45	0.63	0.77	7	0.5	6.8	17.2	10.4	26.5	13.3	33.9	HL1003SS
				LPM	0.76	0.91	1.06	1.21	1.70	2.38	2.91	20	1.4	10.2	25.9	15.6	39.7	20.0	50.8	
	HL1005SS	5	0.120"	GPM	0.27	0.35	0.39	0.49	0.65	0.91	1.12	7	0.5	8.4	21.3	9.7	24.7	14.3	36.3	HL1005SS
				LPM	1.02	1.32	1.47	1.85	2.46	3.44	4.23	20	1.4	12.6	32.0	14.6	37.0	21.5	54.5	
	HL1008SS	8	0.166"	GPM	0.46	0.59	0.73	0.80	1.16	1.60	2.04	7	0.5	7.1	18.0	7.8	19.8	10.1	25.6	HL1008SS
				LPM	1.74	2.23	2.76	3.02	4.38	6.05	7.71	20	1.4	10.6	26.9	11.7	29.7	15.1	38.4	
	HL1011SS	11	0.180"	GPM	0.65	0.81	0.93	1.10	1.47	2.03	2.50	7	0.5	9.5	24.2	12.0	30.5	14.8	37.6	HL1011SS
				LPM	2.46	3.06	3.52	4.16	5.56	7.67	9.45	20	1.4	14.3	36.4	18.0	45.7	22.2	56.5	
													60	4.1	23.9	60.6	30.0	76.2	37.0	94.1

Liquid Atomizing Spray Nozzles



HollowStream™ Cone Nozzles – 3/8 NPT



Model: HL3005SS

Material: Type 303 Stainless Steel

Model: HL3008SS

Material: Type 303 Stainless Steel

Model: HL3010SS

Material: Type 303 Stainless Steel

Model: HL3015SS

Material: Type 303 Stainless Steel

Model: HL3020SS

Material: Type 303 Stainless Steel

Model: HL3025SS

Material: Type 303 Stainless Steel

Model: HL3030SS

Material: Type 303 Stainless Steel

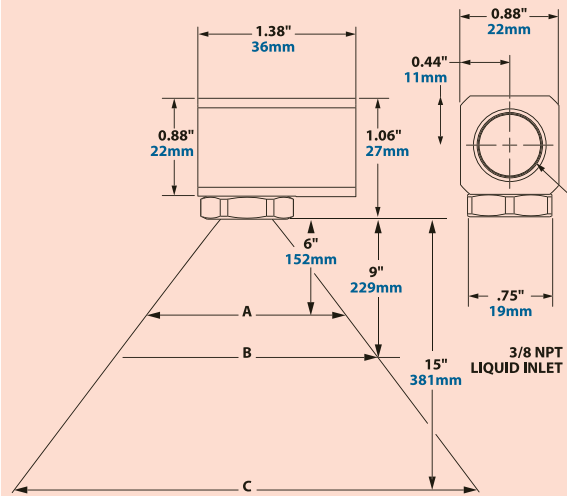
Compared to EXAIR's Air Atomizing Spray Nozzles the HollowStream will have higher liquid flow rates.

For maximum liquid conservation and spray control visit Air Atomizing Nozzles on page 70.

Model HL3005SS, HL3008SS, HL3010SS, HL3015SS, HL3020SS, HL3025SS and HL3030SS

EXAIR's 3/8 NPT HollowStream Cone Nozzles produce a ring of liquid upon your target and are among the most common type of spray nozzles. Hollow cone spray nozzles generally use less liquid than full cone spray nozzles. These nozzles will be used for cooling, cleaning, washing, rinsing and dust suppression with less liquid than a full cone nozzle. Their tangential flow design is vaneless which creates wide open internal features to resist clogging. They produce a uniform distribution in a hollow cone round pattern and medium to large droplets. The right-angle design is compact and operates at up to 250 PSI liquid pressure. HollowStream nozzles work well with liquids containing particulate.

Dimensions Spray Pattern



See page 98 for How the OmniStream and HollowStream Cone Nozzles Work.



3/8 NPT HollowStream nozzle lowers emissions inside of a gas scrubber.

HollowStream Cone Nozzles													Spray Angle								
Inlet Connection	Model	Capacity	Max Free Passage	Flow Rate GPM/LPM									Inlet		Width						
					3 PSI	5 PSI	7 PSI	10 PSI	20 PSI	30 PSI	40 PSI	60 PSI			Pressure PSI/BAR		A		B		C
															in	cm	in	cm	in	cm	
3/8 NPT	HL3005SS	5	0.111"	GPM	0.29	0.34	0.39	0.45	0.62	0.75	0.86	1.04	7	0.5	10.1	25.6	15.1	38.4	25.2	63.9	
				LPM	1.11	1.30	1.48	1.71	2.35	2.83	3.25	3.95	20	1.4	11.0	27.9	16.5	41.9	27.5	69.8	
		HL3008SS	8	0.159"	GPM	0.50	0.60	0.71	0.82	1.12	1.33	1.50	1.80	60	4.1	11.8	30.0	17.7	44.9	29.5	74.9
					LPM	1.88	2.28	2.68	3.09	4.25	5.04	5.68	6.80	7	0.5	7.5	19.0	11.2	28.6	18.7	47.6
		HL3010SS	10	0.172"	GPM	0.64	0.75	0.89	1.01	1.36	1.62	1.83	2.47	20	1.4	8.4	21.3	12.6	32.0	21.0	53.4
					LPM	2.42	2.84	3.36	3.81	5.16	6.13	6.93	9.35	60	4.1	10.1	25.6	15.1	38.4	25.2	63.9
	HL3015SS	15	0.166"	GPM	0.94	1.10	1.29	1.48	1.98	2.60	2.80	3.60	7	0.5	8.4	21.3	12.6	32.0	21.0	53.4	
				LPM	3.54	4.16	4.88	5.60	7.48	9.84	10.60	13.63	20	1.4	9.5	24.2	14.3	36.4	23.9	60.6	
		HL3020SS	20	0.203"	GPM	1.28	1.50	1.81	2.00	2.75	3.39	3.92	4.53	60	4.1	10.4	26.5	15.6	39.7	26.1	66.2
					LPM	4.86	5.69	6.86	7.57	10.41	12.84	14.83	17.13	7	0.5	11.4	28.9	17.1	43.4	28.5	72.3
		HL3025SS	25	0.219"	GPM	1.45	1.78	2.02	2.45	3.34	4.00	4.52	5.40	20	1.4	13.1	33.3	19.6	49.9	32.7	83.2
					LPM	5.49	6.75	7.63	9.27	12.65	15.14	17.10	20.44	60	4.1	13.8	35.1	20.7	52.6	34.5	87.7
	HL3030SS	30	0.281"	GPM	1.80	2.30	2.68	3.10	4.23	5.13	6.03	7.28	7	0.5	11.4	28.9	17.1	43.4	28.5	72.3	
				LPM	6.81	8.71	10.13	11.73	15.99	19.40	22.81	27.54	20	1.4	12.0	30.5	18.0	45.7	30.0	76.2	
		HL3020SS	20	0.203"	GPM	1.28	1.50	1.81	2.00	2.75	3.39	3.92	4.53	60	4.1	13.1	33.3	19.6	49.9	32.7	83.2
					LPM	4.86	5.69	6.86	7.57	10.41	12.84	14.83	17.13	7	0.5	10.1	25.6	15.1	38.4	25.2	63.9
		HL3025SS	25	0.219"	GPM	1.45	1.78	2.02	2.45	3.34	4.00	4.52	5.40	20	1.4	11.0	27.9	16.5	41.9	27.5	69.8
					LPM	5.49	6.75	7.63	9.27	12.65	15.14	17.10	20.44	60	4.1	12.0	30.5	18.0	45.7	30.0	76.2
	HL3030SS	30	0.281"	GPM	1.80	2.30	2.68	3.10	4.23	5.13	6.03	7.28	7	0.5	8.2	20.9	12.4	31.4	20.6	52.4	
				LPM	6.81	8.71	10.13	11.73	15.99	19.40	22.81	27.54	20	1.4	8.7	22.1	13.1	33.2	21.8	55.4	
	HL3030SS	30	0.281"	GPM	1.80	2.30	2.68	3.10	4.23	5.13	6.03	7.28	60	4.1	10.1	25.6	15.1	38.4	25.2	63.9	
				LPM	6.81	8.71	10.13	11.73	15.99	19.40	22.81	27.54	7	0.5	10.1	25.6	15.1	38.4	25.2	63.9	

Liquid Atomizing Spray Nozzles

HollowStream™ Cone Nozzles – 1/2 NPT



Model: HL5025SS
Material: Type 303 Stainless Steel

Model: HL5030SS
Material: Type 303 Stainless Steel

Model: HL5040SS
Material: Type 303 Stainless Steel

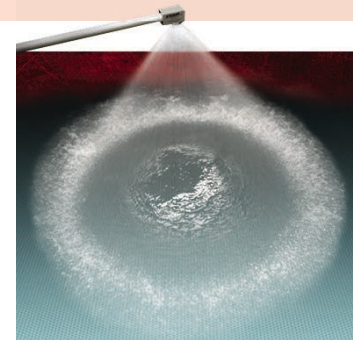
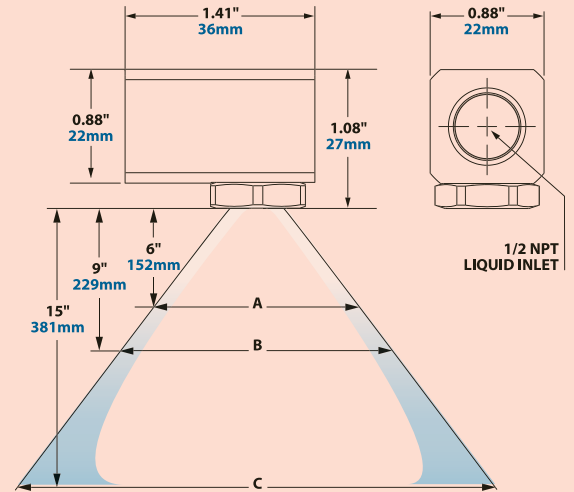
Model: HL5050SS
Material: Type 303 Stainless Steel

Model: HL5060SS
Material: Type 303 Stainless Steel

Model HL5025SS, HL5030SS, HL5040SS, HL5050SS, HL5060SS EXAIR's 1/2 NPT HollowStream Cone Nozzles produce a ring of liquid upon your target and are among the most common type of spray nozzles. Hollow cone spray nozzles generally use less liquid than full cone spray nozzles. These nozzles will be used for cooling, cleaning, washing, rinsing and dust suppression with less liquid than a full cone nozzle. Their tangential flow design is vaneless which creates wide open internal features to resist clogging. They produce a uniform distribution in a hollow cone round pattern and medium to large droplets. The right-angle design is compact and operates at up to 250 PSI liquid pressure. HollowStream nozzles work well with liquids containing particulate.

Dimensions and Spray Pattern

DOWNLOAD drawings at EXAIR.com



The precision machining of the HollowStream nozzle produces a controlled spray angle in this rinsing operation.

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

For maximum liquid conservation and spray control visit our Air Atomizing Nozzles on page 70.

HollowStream Cone Nozzles													Spray Angle								
Inlet Connection	Model	Capacity	Max Free Passage	Flow Rate GPM/LPM									Inlet		Width						
					3 PSI	5 PSI	7 PSI	10 PSI	20 PSI	30 PSI	40 PSI	60 PSI			Pressure PSI/BAR		A		B		
															in	cm	in	cm	in	cm	
1/2 NPT	HL5025SS	25	0.281"	GPM	1.60	1.90	2.40	2.50	3.70	4.40	4.80	6.00	7	0.5	6.9	17.6	10.4	26.4	17.3	44.0	HL5025SS
				LPM	6.06	7.19	9.08	9.46	14.01	16.66	18.17	22.71	20	1.4	7.5	19.0	11.2	28.6	18.7	47.6	
	HL5030SS	30	0.313"	GPM	1.90	2.20	2.50	3.00	4.20	5.00	5.60	7.00	7	0.5	8.4	21.3	12.6	32.0	21.0	53.4	HL5030SS
				LPM	7.19	8.33	9.46	11.36	15.90	18.93	21.20	26.50	20	1.4	9.0	23.0	13.6	34.5	22.6	57.4	
	HL5040SS	40	0.344"	GPM	2.40	2.80	3.20	3.90	5.20	6.20	6.80	8.20	7	0.5	10.1	25.6	15.1	38.4	25.2	63.9	HL5040SS
				LPM	9.08	10.60	12.11	14.76	19.68	23.47	25.74	31.04	20	1.4	10.8	27.4	16.2	41.2	27.0	68.6	
	HL5050SS	50	0.344"	GPM	3.20	3.80	4.60	5.00	6.80	7.90	9.00	12.50	7	0.5	12.0	30.5	18.0	45.7	30.0	76.2	HL5050SS
				LPM	12.11	14.38	17.41	18.93	25.74	29.90	34.07	47.32	20	1.4	12.9	32.7	19.3	49.0	32.2	81.7	
	HL5060SS	60	0.344"	GPM	3.20	3.80	4.60	5.00	6.80	7.90	9.00	12.50	7	0.5	13.8	35.1	20.7	52.6	34.5	87.7	HL5060SS
				LPM	12.11	14.38	17.41	18.93	25.74	29.90	34.07	47.32	20	1.4	14.3	36.3	21.5	54.5	35.8	90.8	
	HL5060SS	60	0.344"	GPM	3.60	4.20	5.40	6.00	7.80	9.20	11.50	14.00	7	0.5	15.4	39.0	23.0	58.5	38.4	97.5	HL5060SS
				LPM	13.63	15.90	20.44	22.71	29.53	34.83	43.53	53.00	20	1.4	15.4	39.0	23.0	58.5	38.4	97.5	
HL5060SS	60	0.344"	GPM	3.60	4.20	5.40	6.00	7.80	9.20	11.50	14.00	7	0.5	14.3	36.3	21.5	54.5	35.8	90.8	HL5060SS	
			LPM	13.63	15.90	20.44	22.71	29.53	34.83	43.53	53.00	20	1.4	17.1	43.5	25.7	65.3	43.8	111.4		
HL5060SS	60	0.344"	GPM	3.60	4.20	5.40	6.00	7.80	9.20	11.50	14.00	7	0.5	18.5	46.9	27.7	70.4	46.2	117.3	HL5060SS	
			LPM	13.63	15.90	20.44	22.71	29.53	34.83	43.53	53.00	20	1.4	18.5	46.9	27.7	70.4	46.2	117.3		

Liquid Atomizing Spray Nozzles

PowerStream™ Liquid Nozzles – 1/8 NPT



Model: DL8025SS

Material: Type 303 Stainless Steel

Model: DL8030SS

Material: Type 303 Stainless Steel

Model: DL8040SS

Material: Type 303 Stainless Steel

Model: DL8050SS

Material: Type 303 Stainless Steel

Model: DL8075SS

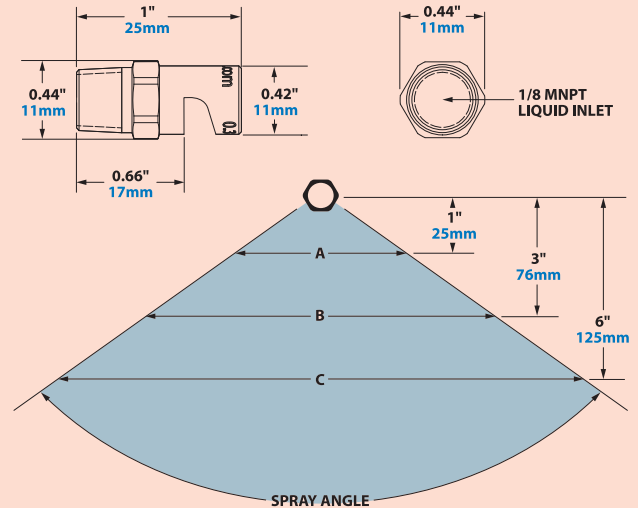
Material: Type 303 Stainless Steel

Model DL8025SS, DL8030SS, DL8040SS, DL8050SS, DL8075SS

EXAIR's 1/8 NPT PowerStream Liquid Nozzles provide a superior spraying solution for an extensive range of industrial processes and operates at up to 250 PSI liquid pressure. These processes include, but are not limited to, cooling, rinsing, washing, coating, and dust control. Designed to provide a uniform, deflected flat fan spray pattern, this nozzle ensures efficient liquid distribution that is consistent across the full width of spray. Its clog-resistant design makes it a perfect choice for environments dealing with particulates or potentially viscous fluids. Available in stainless steel, the PowerStream nozzle supports a variety of flow rates, allowing for flexible integration into existing systems, or for use in newly designed builds. Whether you need precise spray control or effective dust suppression, the PowerStream nozzle from EXAIR is engineered to meet your requirements with exceptional performance, repeatability and durability.

Dimensions and Spray Pattern

DOWNLOAD
drawings at
EXAIR.com



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

For maximum liquid conservation and spray control visit our Air Atomizing Nozzles on page 70.



PowerStream Nozzles provide a superior spraying solution for an extensive range of industrial processes.

PowerStream Nozzles												Spray Angle									
Inlet Connection	Model	Capacity	Max Free Passage	Flow Rate GPM/LPM								Inlet		Spray Angle	Width						
					3 PSI	5 PSI	7 PSI	10 PSI	20 PSI	40 PSI	60 PSI				Pressure PSI/BAR	Degrees	A		B		
														in	cm	in	cm	in	cm		
1/8 NPT	DL8025SS	2.5	0.055"	GPM	0.15	0.19	0.20	0.24	0.36	0.50	0.64	7	0.5	70	1.4	4	4.2	11	8.4	21	DL8025SS
				LPM	0.57	0.72	0.76	0.91	1.36	1.89	2.42	20	1.4	80	1.7	4	5.0	13	10.1	26	
	DL8030SS	3	0.063"	GPM	0.17	0.22	0.25	0.31	0.45	0.67	0.83	7	0.5	80	1.7	4	5.0	13	10.1	26	DL8030SS
				LPM	0.64	0.83	0.95	1.17	1.70	2.54	3.14	20	1.4	100	2.4	6	7.2	18	14.3	36	
	DL8040SS	4	0.070"	GPM	0.22	0.27	0.33	0.40	0.59	0.86	1.06	7	0.5	90	2.0	5	6.0	15	12.0	30	DL8040SS
				LPM	0.83	1.02	1.25	1.51	2.23	3.26	4.01	20	1.4	110	2.9	7	8.6	22	17.1	44	
	DL8050SS	5	0.079"	GPM	0.27	0.34	0.42	0.50	0.74	1.09	1.32	7	0.5	120	3.5	9	10.4	26	20.8	53	DL8050SS
				LPM	1.02	1.29	1.59	1.89	2.80	4.13	5.00	20	1.4	120	3.5	9	10.4	26	20.8	53	
	DL8075SS	7.5	0.094"	GPM	0.38	0.50	0.61	0.75	1.08	1.51	1.84	7	0.5	140	5.5	14	16.5	42	33.0	84	DL8075SS
				LPM	1.44	1.89	2.31	2.84	4.09	5.72	6.97	20	1.4	140	5.5	14	16.5	42	33.0	84	

NEW BETE Hydraulic Nozzles

Since 1950, over 30,000,000 BETE nozzles have sprayed in deep sea, deep space, and everywhere in between.

What Makes BETE an Industry Leader in Spray Technology?

A pioneer and innovator in all areas of spray nozzle engineering, manufacturing, and application solutions, BETE improves spray processes worldwide for numerous markets, including food and beverage, petrochemical, chemical, waste management and pollution control. We manufacture tens of thousands of different products, including misting and fogging nozzles, tank cleaning nozzles, chemical injection nozzles, custom spray lances, fabrications and spraying systems. BETE integrates decades of experience in spray design and applications engineering with a CNC machine shop, foundry, and spray lab that enables in-house product design, manufacturing and testing to ensure the highest quality spray technology.

Why is Selecting the Correct Spray Nozzle Important?

Spray nozzles may be relatively small components of large industrial processes, but incorporating the proper nozzles is critical to achieving peak system performance and efficiency. BETE's extensive catalog of hydraulic nozzles includes full cone, hollow cone, fan, misting, fogging, tank cleaning and automatic spray nozzles. These nozzles come in various sizes, connection types, flow rates, spray angles and materials. Whatever your spraying challenge, BETE has an efficient and effective solution to help optimize your process.

Applications

- Cleaning & Washing
- Dust Suppression
- Humidification
- Tank Cleaning
- Cooling
- Gas Conditioning
- Foam Control
- Vacuum Distillation
- Odor Control
- Chemical Injection
- Fire Protection
- Coating & Lubricating
- Moistening
- Flue Gas Desulfurization (FGD)

Advantages

- Expertly Engineered
- Durable Construction
- High Efficiency
- Reliable Performance
- Save Resources
- Innovative Technology
- Optimize Processes
- Ready for Immediate Shipment

All weights and dimensions are approximate. Spray angle performance varies with pressure. Please contact EXAIR for specific data on critical applications.

Hydraulic Misting & Fogging Nozzles

MicroWhirl® (MW) Misting & Fogging Nozzles



Series: MicroWhirl MW
Connection: 1/8 Male NPT
Spray Angle: 70°
Material: 316 Stainless Steel

MW Models

BETE MicroWhirl† nozzles offer outstanding fine mist or fog with a rugged, pinless design that ensures drip-free performance. They include a 70-micron polypropylene filter. A 200-mesh 316 Stainless Steel filter option is available as an alternative. A safety wire hole is also available for added security. The nozzle operates with a minimum pressure of 100 PSI (7 BAR) and delivers versatile spray performance, producing mist at lower pressures and fog at higher pressures. Droplets are typically small enough that buoyancy is significant compared to gravity, allowing drops to appear to float. In actuality, particles fall very slowly in the absence of upward airflow.

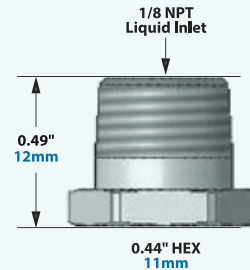
† Patent #7198201

Customers trust BETE's MicroWhirl misting nozzles for the finest hydraulic atomization, especially under critical conditions.

Ideal for cooling, humidification and complete evaporation.

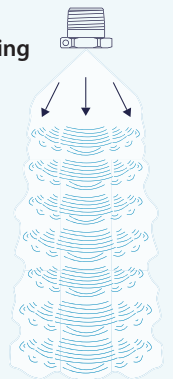


Dimensions



How Swirl Misting Nozzles Work

BETE engineers patented the whirl fine misting nozzle in 2002. Misting and fogging spray nozzles traditionally use either an impingement or air-atomizing design to produce small droplets. Alternatively, whirl misting nozzles convert the fluid's head pressure into kinetic energy within a swirl chamber. The discharged fluid breaks up the droplets from the centrifugal force. MicroWhirl nozzles utilize a vortex to create a fine mist, increasing reliability and performance compared with traditional methods.



MicroWhirl misting nozzles produce outstanding atomization for humidification, air inlet cooling, dust suppression and more.

MicroWhirl Flow Rates and Dimensions

Pattern: Misting/ Fogging		Spray Angle: 70°	Connection: 1/8 Male NPT		Material: 316 SS						Wt (oz)
Male Inlet Connection	Model	K Factor	100 PSI	300 PSI	600 PSI	1000 PSI	1500 PSI	2000 PSI	2500 PSI	3000 PSI	
1/8 NPT	6094622	0.00085	0.009	0.015	0.021	0.027	0.033	0.038	0.043	0.047	0.25
	6109975	0.00275	0.028	0.048	0.067	0.087	0.107	0.123	0.138	0.151	
	6149734	0.00693	0.069	0.120	0.170	0.219	0.268	0.310	0.347	0.380	

Flow Rate GPM = $K \sqrt{\text{PSI}}$

MicroWhirl Flow Rates and Dimensions

Pattern: Misting/ Fogging		Spray Angle: 70°	Connection: 1/8 Male NPT		Material: 316 SS						Wt (g)
Male Inlet Connection	Model	K Factor	7 BAR	20 BAR	40 BAR	70 BAR	100 BAR	140 BAR	170 BAR	200 BAR	
1/8 NPT	6094622	0.01220	0.032	0.055	0.077	0.102	0.122	0.145	0.160	0.173	7.09
	6109975	0.03960	0.105	0.177	0.251	0.332	0.396	0.469	0.517	0.560	
	6149734	0.09988	0.264	0.447	0.632	0.836	0.999	1.182	1.302	1.413	

Flow Rate L/min = $K \sqrt{\text{BAR}}$

Flat Fan Nozzles

NF Standard Fan Nozzles



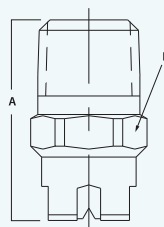
Series: NF
Connections: 1/8 - 3/8 Male NPT
Spray Angles: 30°, 65°, 80°, 120°
Material: Brass

The flat spray pattern optimizes a wide range of applications including surface cleaning, coating, high-impact washing and foam control.

NF Models

The NF fan spray nozzle provides high-impact spray with evenly tapered edges, enabling effective overlapping of sprays for complete coverage. With a durable, one-piece construction and no internal parts, this nozzle is reliable and easy to maintain. Available in various male connection sizes, flow rates, and spray angles, the NF nozzle is the ideal solution for numerous industrial applications including coating, conveyor cleaning, and parts washing.

Dimensions and Spray Pattern



How Flat Fan Nozzles Work

As the fluid exits the nozzle's elliptical orifice, it is forced into a thin, flat sheet of fluid, producing a fan-like spray pattern.



NF Flow Rates															Dimensions for Metal Only (in)				
Pattern: Fan		Spray Angles: 30°, 65°, 80° and 120°				Connection: 1/8-3/8 Male NPT				Material: Brass									
Male Inlet Connection	Spray angle				K Factor	Flow Rates (GPM @ PSI)										Equiv Orifice Dia (in)"			
	30°	65°	80°	120°		5 PSI	10 PSI	15 PSI	20 PSI	30 PSI	40 PSI	60 PSI	80 PSI	100 PSI					
1/8 NPT Model	6011359	6017030	6003573	6013268	0.0791	0.18	0.25	0.31	0.35	0.43	0.50	0.61	0.71	0.79	0.057	1/8"	0.88	0.44	1.00
	6011652	6011842	6006147	6013456	0.158	0.35	0.50	0.61	0.71	0.87	1.00	1.22	1.41	1.58	0.080				
	6013109	6011261	6007832	6003609	0.316	0.71	1.00	1.22	1.41	1.73	2.00	2.45	2.83	3.16	0.109				
	6013470	6011672	6008463	6003944	0.474	1.06	1.50	1.84	2.12	2.60	3.00	3.67	4.24	4.74	0.141				
1/4 NPT Model	6039856	6044390	6020398	6027632	0.0791	0.18	0.25	0.31	0.35	0.43	0.50	0.61	0.71	0.79	0.057	1/4"	1.06	0.56	1.50
	6003572	6005653	6009320	6006482	0.158	0.35	0.50	0.61	0.71	0.87	1.00	1.22	1.41	1.58	0.080				
	6020542	6003868	6009566	6005313	0.316	0.71	1.00	1.22	1.41	1.73	2.00	2.45	2.83	3.16	0.109				
	6013112	6008836	6005921	6003113	0.474	1.06	1.50	1.84	2.12	2.60	3.00	3.67	4.24	4.74	0.141				
	6004735	6010893	6009858	6014763	0.632	1.41	2.00	2.45	2.83	3.46	4.00	4.90	5.66	6.32	0.156				
	6013265	6014774	6004072	6010699	0.791	1.77	2.50	3.06	3.54	4.33	5.00	6.12	7.07	7.91	0.172				
3/8 NPT Model	6008562	6007564	6008688	6011539	0.316	0.71	1.00	1.22	1.41	1.73	2.00	2.45	2.83	3.16	0.109	3/8"	1.25	0.69	2.00
	6008312	6008326	6008706	6011280	0.474	1.06	1.50	1.84	2.12	2.60	3.00	3.67	4.24	4.74	0.141				
	6008702	6002612	6003828	6011675	0.632	1.41	2.00	2.45	2.83	3.46	4.00	4.90	5.66	6.32	0.156				
	6004093	6010885	6015429	6008709	0.791	1.77	2.50	3.06	3.54	4.33	5.00	6.12	7.07	7.91	0.172				

Flow Rate GPM = $K \sqrt{PSI}$

NF Flow Rates													Dimensions for Metal Only (mm)			
Pattern: Fan	Spray Angles: 30°, 65°, 80° and 120°				Connection: 1/8-3/8 Male NPT		Material: Brass									
Male Inlet Connection	Spray angle				K Factor	Flow Rates (L/min @ BAR)						Equiv Orifice Dia (mm)	Pipe Size	A	B	Wt (g) Metal
	30°	65°	80°	120°		0.5 BAR	0.7 BAR	1 BAR	2 BAR	3 BAR	5 BAR					
1/8 NPT Model	6011359	6017030	6003573	6013268	1.14	0.81	0.95	1.14	1.61	1.97	2.55	1.45	1/8"	22.2	11.1	28.4
	6011652	6011842	6006147	6013456	2.28	1.61	1.91	2.28	3.22	3.95	5.10	2.03				
	6013109	6011261	6007832	6003609	4.56	3.22	3.81	4.56	6.45	7.89	10.2	2.78				
	6013470	6011672	6008463	6003944	6.84	4.83	5.72	6.84	9.67	11.8	15.3	3.57				
1/4 NPT Model	6039856	6044390	6020398	6027632	1.14	0.81	0.95	1.14	1.61	1.97	2.55	1.45	1/4"	27.0	14.3	42.5
	6003572	6005653	6009320	6006482	2.28	1.61	1.91	2.28	3.22	3.95	5.10	2.03				
	6020542	6003868	6009566	6005313	4.56	3.22	3.81	4.56	6.45	7.89	10.2	2.78				
	6013112	6008836	6005921	6003113	6.84	4.83	5.72	6.84	9.67	11.8	15.3	3.57				
	6004735	6010893	6009858	6014763	9.12	6.45	7.63	9.12	12.9	15.8	20.4	3.97				
	6013265	6014774	6004072	6010699	11.4	8.06	9.53	11.4	16.1	19.7	25.5	4.37				
3/8 NPT Model	6008562	6007564	6008688	6011539	4.56	3.22	3.81	4.56	6.45	7.89	10.2	2.78	3/8"	31.8	17.5	56.7
	6008312	6008326	6008706	6011280	6.84	4.83	5.72	6.84	9.67	11.8	15.3	3.57				
	6008702	6002612	6003828	6011675	9.12	6.45	7.63	9.12	12.9	15.8	20.4	3.97				
	6004093	6010885	6015429	6008709	11.4	8.06	9.53	11.4	16.1	19.7	25.5	4.37				

Flow Rate L/min = $K \sqrt{BAR}$

Full Cone Spiral Nozzles

TF Full Cone Spray Nozzles

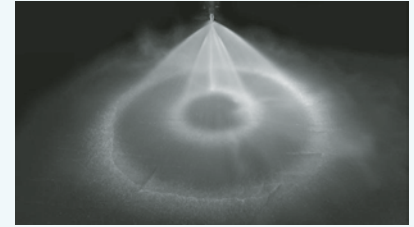
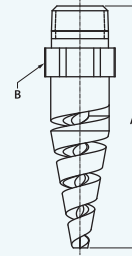


Series: TF
Connections: 1/4 - 1 Male NPT
Spray Angles: 60°, 90°, 120°
Material: Brass

TF Models

BETE is the original inventor of the spiral, also known as a pigtail, corkscrew, or helix nozzle. Its durable, one-piece design with no internal parts delivers clog-resistant performance and high energy efficiency. When compared to whirl-type nozzles of the same flow rate, pressure drop, and angle, TF spirals produce considerably smaller droplet sizes for fine atomization.

Dimensions and Spray Pattern



90°, 120°, 60° nozzles are slightly longer. For dimensions, contact EXAIR.

How Full Cone Spirals Work

The spiral nozzle pattern is created by fluid shearing along the spiral's turns, creating multiple concentric hollow cones. This design produces two to three bands of coarser droplets, each surrounded by wider bands of finer droplets, resulting in full coverage.



Numerous industries rely on BETE TF full cone spray nozzles for their gas cooling, quenching or chemical injection applications.

Its durable, one-piece design is clog resistant and requires minimal maintenance.

TF Full Cone Flow Rates and Dimensions

Pattern: Full Cone Spray Angles: 60°, 90°, 120° Connection: 1/4 - 1 Male NPT Material: Brass																			
Male Inlet Connection	Available Spray Angles			K Factor	Flow Rate (GPM @ PSI)										Approx Orifice Dia (in)	Approx Free Passage Dia (in)	A	B	Wt (oz) Metal
	60°	90°	120°		5 PSI	10 PSI	20 PSI	30 PSI	40 PSI	50 PSI	60 PSI	80 PSI	100 PSI						
1/4 NPT Model	6015283	6013583	6013407	0.221	0.495	0.70	0.99	1.21	1.40	1.57	1.71	1.98	2.21	0.09	0.09	1.88	0.56	1.25	
	6009295	6003058	6016084	0.411	0.919	1.30	1.84	2.25	2.60	2.91	3.18	3.68	4.11	0.13	0.13				
	6005350	6013392	6010125	0.632	1.41	2.00	2.83	3.46	4.00	4.47	4.90	5.66	6.32	0.16	0.13				
3/8 NPT Model	6011546	6012770	6012736	0.949	2.12	3.00	4.24	5.20	6.00	6.71	7.35	8.49	9.49	0.19	0.13	1.88	0.69	1.63	
	6015134	6010116	6012832	1.28	2.86	4.05	5.73	7.01	8.10	9.06	9.92	11.5	12.8	0.22					
	6006217	6012073	6005617	1.68	3.75	5.30	7.50	9.18	10.6	11.9	13.0	15.0	16.8	0.25					
	6009079	6011877	6003941	2.61	5.83	8.25	11.7	14.3	16.5	18.4	20.2	23.3	26.1	0.31					
1/2 NPT Model	6007586	6013307	6007059	3.81	8.52	12.1	17	20.9	24.1	26.9	29.5	34.1	38.1	0.38	0.19	2.5	0.88	3.00	
	6002504	6005485	6016180	5.22	11.7	16.5	23.3	28.6	33.0	36.9	40.4	46.7	52.2	0.44					
3/4 NPT Model	6003090	6010373	6013110	6.64	14.8	21.0	29.7	36.4	42.0	47.0	51.4	59.4	66.4	0.50	0.19	2.75	1.13	5.50	
1 NPT Model	6012340	6016360	6016286	10.6	23.7	33.5	47.4	58.0	67.0	74.9	82.1	94.8	106	0.63	0.25	3.63	1.38	8.50	

Flow Rate GPM = $K \sqrt{PSI}$

TF Full Cone Flow Rates and Dimensions

Pattern: Full Cone Spray Angles: 60°, 90°, 120° Connection: 1/4 - 1 Male NPT Material: Brass																
Male Inlet Connection	Available Spray Angles			K Factor	Flow Rate (L/min @ BAR)						Approx Orifice Dia (mm)	Approx Free Passage Dia (mm)	A	B	Wt (g) Metal	
	60°	90°	120°		0.5 BAR	0.7 BAR	1 BAR	2 BAR	3 BAR	5 BAR						
1/4 NPT Model	6015283	6013583	6013407	3.19	2.26	2.67	3.19	4.50	5.50	7.10	2.38	2.38	47.6	14.3	35.0	
	6009295	6003058	6016084	5.93	4.19	4.96	5.93	8.4	10.3	13.2	3.18	3.18				
	6005350	6013392	6010125	9.12	6.45	7.63	9.12	12.9	15.8	20.4	3.97	3.18				
3/8 NPT Model	6011546	6012770	6012736	13.7	9.67	11.4	13.7	19.3	23.7	30.6	4.76	3.18	47.6	17.5	46.0	
	6015134	6010116	6012832	18.5	13.1	15.4	18.5	26.1	32.0	41.3	5.56					
	6006217	6012073	6005617	24.2	17.1	20.2	24.2	34.2	41.8	54.0	6.35					
	6009079	6011877	6003941	37.6	26.6	31.5	37.6	53.2	65.1	84.1	7.94					
1/2 NPT Model	6007586	6013307	6007059	54.9	38.8	46.0	54.9	77.7	95.1	123	9.53	4.76	63.5	22.2	85.0	
	6002504	6005485	6016180	75.2	53.2	62.9	75.2	106	130	168	11.1					
3/4 NPT Model	6003090	6010373	6013110	95.7	67.7	80.1	95.7	135	166	214	12.7	4.76	69.9	28.6	156	
1 NPT Model	6012340	6016360	6016286	153	108	128	153	216	264	341	15.9	6.35	92.1	34.9	241	

Flow Rate L/min = $K \sqrt{BAR}$



11510 Goldcoast Drive • Cincinnati, OH 45249-1621 • Phone (513) 671-3322
 FAX (513) 671-3363 • E-mail: techhelp@exair.com • www.exair.com



Full Cone Nozzles

MaxiPass® (MP) Maximum Free Passage Nozzles



Series: MaxiPass (MP)

Connections: 3/8 - 3/4 Male NPT

Spray Angles: 60°, 90°, 120°

Materials: 316 Stainless Steel

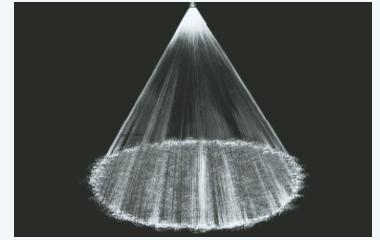
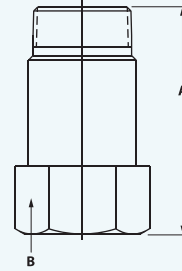
Polypropylene available for specific models (90°, 120° Only)

MP Models

The patented† MaxiPass design features maximum free passage for ultimate clog resistance compared to other whirl-type nozzles. This ensures high energy efficiency and reliable performance, even with dirty or lumpy liquids. Unlike conventional X-vane nozzles, the MP is engineered with two unique S-shaped internal vanes to maximize free passage, making this nozzle highly dependable under even the most challenging conditions. MP nozzles achieve atomization by swirling the water internally through its vanes before exiting through the orifice, producing medium to coarse droplet sizes. Its spray pattern is more uniform than that of spiral nozzles, providing consistent coverage across applications.

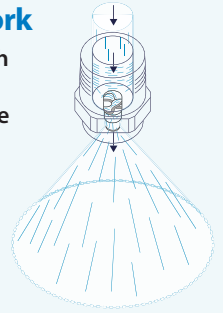
† Patent #4014470

Dimensions and Spray Pattern



How Full Cone Nozzles Work

The full cone axial spray nozzle with internal vanes produces a uniform conical spray pattern with complete coverage. As the liquid passes through the vanes, it is stabilized and evenly distributed before exiting the nozzle's orifice.



The MP is the leading spray solution for process critical applications such as gas scrubbing, cooling, foam control and vacuum distillation.

Alloy MP nozzles are cast in BETE's U.S. foundry, ensuring high-quality, durable construction.

MaxiPass Flow Rates and Dimensions

Pattern: Full Cone		Spray Angles: 60°, 90°, 120°			Connection: 3/8, 1/2, 3/4 NPT		Material: 316 SS, Polypropylene (Specific 90°, 120° Models Only)													
Male Inlet Connection	Material	Available Spray Angles			K Factor	Flow Rate (GPM @ PSI)								Approx Free Passage Dia (in)	Approx Dim (in) Overall Length (Max)			B	Wt (lbs) Metal	Wt (lbs) Polypro
		60°	90°	120°		3 PSI	5 PSI	7 PSI	10 PSI	15 PSI	20 PSI	30 PSI	40 PSI		A (60°)	A (90°)	A (120°)			
3/8 NPT Model	Polypropylene	--	6182995	6186144	0.416	0.70	0.89	1.04	1.23	1.49	1.70	2.06	2.35	0.125	1.50	1.50	1.50	0.88	0.19	.017
	316SS	6003212	6002739	6011935	0.661	1.11	1.41	1.65	1.95	2.36	2.70	3.27	3.74	0.156						
1/2 NPT Model	Polypropylene	--	6164563	6185953	0.954	1.60	2.03	2.38	2.82	3.41	3.90	4.72	5.40	0.188	1.88	1.88	1.88	1.00	0.28	.023
	316SS	6006652	6014543	6015833	1.71	2.87	3.65	4.27	5.05	6.11	7.00	8.47	9.70	0.250					0.25	
3/4 NPT Model	316SS	6009757	6008929	6016672	2.54	4.26	5.42	6.35	7.51	9.08	10.4	12.6	14.4	0.312	2.50	2.50	2.50	1.25	0.50	.246
		6014786	6008945	6010643	3.67	6.15	7.82	9.16	10.8	13.1	15.0	18.1	20.8	0.375					0.44	

Flow Rate GPM = K (PSI) 0.47

MaxiPass Flow Rates and Dimensions

Pattern: Full Cone		Spray Angles: 60°, 90°, 120°			Connection: 3/8, 1/2, 3/4 NPT		Material: 316 SS, Polypropylene (Specific 90°, 120° Models Only)													
Male Inlet Connection	Material	Available Spray Angles			K Factor	Flow Rate (L/min @ BAR)								Approx Free Passage Dia (mm)	Approx Dim (mm) Overall Length (Max)			B	Wt (kg) Metal	Wt (kg) Polypro
		60°	90°	120°		0.2 BAR	0.3 BAR	0.5 BAR	0.7 BAR	1 BAR	2 BAR				A (60°)	A (90°)	A (120°)			
3/8 NPT Model	Polypropylene	--	6182995	6186144	5.53	2.6	3.14	3.99	4.68	5.53	7.66	3.18			38.1	38.1	38.1	22.2	0.09	.008
	316SS	6003212	6002739	6011935	8.79	4.13	4.99	6.35	7.43	8.79	12.2	3.97								
1/2 NPT Model	Polypropylene	--	6164563	6185953	12.7	5.96	7.21	9.17	10.7	12.7	17.6	4.76			47.6	47.6	47.6	25.4	0.13	.010
	316SS	6006652	6014543	6015833	22.7	10.7	12.9	16.4	19.2	22.7	31.4	6.35							0.11	
3/4 NPT Model	316SS	6009757	6008929	6016672	33.8	15.9	19.2	24.4	28.6	33.8	46.8	7.94			63.5	60.3	63.5	31.8	0.23	.112
		6014786	6008945	6010643	48.8	22.9	27.7	35.2	41.3	48.8	67.6	9.53							0.20	

Flow Rate L/min = K (BAR) 0.47

WL Full Cone Nozzle

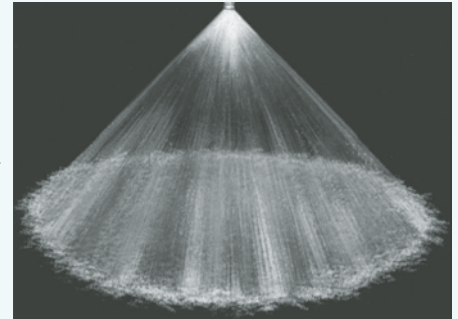
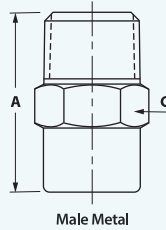


Series: WL
Connections: 1/8 - 3/8 Male NPT
Spray Angles: 60° (3/8 NPT only), 90°, 120°
Material: Brass

WL Models

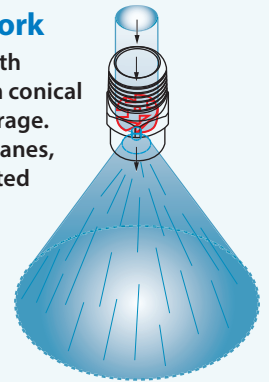
BETE's WL spray nozzle uses a whirl plate design to ensure uniform coverage at a low flow rate. Atomization occurs as water is spun within the nozzle before exiting through the orifice, producing medium to coarse droplets. This design produces a more uniform spray pattern compared to spiral nozzles, making it ideal for applications that demand consistent and precise coverage. These applications include washing, cooling, distribution and foam control.

Dimensions and Spray Pattern



How Full Cone Nozzles Work

The full cone axial spray nozzle with internal vanes produces a uniform conical spray pattern with complete coverage. As the liquid passes through the vanes, it is stabilized and evenly distributed before exiting the nozzle's orifice.



Great for lower flow applications requiring medium to coarse spray atomization and uniform coverage.

For higher flow rates, please see the MaxiPass® full cone nozzle on page 110.

WL Flow Rates and Dimensions

Pattern: Full Cone Spray Angles: 60°, 90°, 120° Connection: 1/8- 3/8 Male NPT Material: Brass											
Male Inlet Connection	Available Spray Angles			K Factor	Flow Rate (GPM @ PSI)						
	60°	90°	120°		10 PSI	20 PSI	30 PSI	40 PSI	60 PSI	80 PSI	100 PSI
1/8 NPT Model	--	6006349	6002104	0.044	0.13	0.18	0.22	0.25	0.30	0.35	0.38
	--	6004759	6005880	0.088	0.26	0.36	0.44	0.50	0.60	0.69	0.77
	--	6014113	6006821	0.132	0.39	0.54	0.66	0.75	0.91	1.04	1.15
1/4 NPT Model	--	6000279	6009470	0.177	0.52	0.72	0.87	1.00	1.21	1.39	1.54
	--	6004516	6004357	0.265	0.78	1.08	1.31	1.50	1.81	2.08	2.31
	--	6016721	6014032	0.353	1.04	1.44	1.75	2.00	2.42	2.77	3.08
3/8 NPT Model	6019124	6012173	6008750	0.530	1.56	2.17	2.62	3.00	3.63	4.16	4.61
	6036152	6011559	6001862	0.706	2.08	2.89	3.49	4.00	4.84	5.54	6.15

Flow Rate GPM = K (PSI) 0.47

Dimensions for Metal Only (in)

Approx Orifice Dia (in)	A	C	Wt (oz) Metal
0.043	0.88	0.44	1.00
0.055			
0.072			
0.082	1.06	0.56	1.50
0.109			
0.125			
0.156	1.25	0.69	2.00
0.188			

WL Flow Rates and Dimensions

Pattern: Full Cone Spray Angles: 60°, 90°, 120° Connection: 1/8- 3/8 Male NPT Material: Brass										
Male Inlet Connection	Available Angles			K Factor	Flow Rate (L/min @ BAR)					
	60°	90°	120°		0.7 BAR	1 BAR	2 BAR	3 BAR	5 BAR	10 BAR
1/8 NPT Model	--	6006349	6002104	0.587	0.497	0.587	0.814	0.984	1.25	1.73
	--	6004759	6005880	1.17	0.993	1.17	1.63	1.97	2.50	3.47
	--	6014113	6006821	1.76	1.49	1.76	2.44	2.95	3.75	5.20
1/4 NPT Model	--	6000279	6009470	2.35	1.99	2.35	3.25	3.94	5.01	6.93
	--	6000516	6004357	3.52	2.98	3.52	4.88	5.91	7.51	10.4
3/8 NPT Model	--	6016721	6014032	4.70	3.97	4.70	6.51	7.87	10.0	13.9
	6019124	6012173	6008750	7.05	5.96	7.05	9.76	11.8	15.0	20.8
	6036152	6011559	6001862	9.40	7.95	9.40	13.0	15.7	20.0	27.7

Flow Rate L/min = K (BAR) 0.47

Dimensions for Metal Only (mm)

Approx Orifice Dia (mm)	A	C	Wt (g) Metal
1.09	22.2	11.1	28.4
1.40			
1.83			
2.08	27.0	14.2	45.5
2.77			
3.18			
3.96	31.8	17.5	56.7
4.78			

Stationary Tank Cleaning Nozzles

HydroClaw® (HC) & TW Spiral Tank Washing Nozzles



Series: HydroClaw (HC)
Material: 316L Stainless Steel



Series: TW
Material: 316 Stainless Steel

HydroClaw nozzles allow passage of particles up to 1/4" in diameter, three times the free passage of comparable spray balls.

The TW series' versatile size range and narrow form ensure compatibility with small vessel openings, including bottles.

HC Models

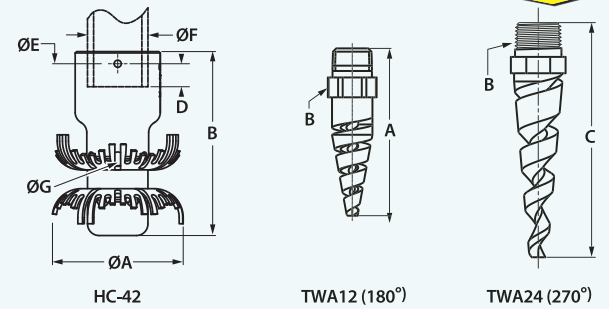
This FDA-compliant, clog-resistant nozzle is ideal for Clean-In-Place (CIP) systems, handles 1/4" particles, and efficiently cleans tanks at low pressure with high flow. Designed for compact openings, the HC† is offered with threaded or secure clip-on connections. Large orifices create heavy jets that disperse via deflection cups into a uniform 360° spray, ensuring complete coverage.

† Patent #10960415

TW Models

This compact, clog-resistant spiral nozzle is energy-efficient, using less water than conventional designs and fits small openings. Easy to maintain, it sprays in unique opposing directions. Its spray pattern forms as fluid shears along the spiral, creating multiple concentric cones with 2-3 bands of coarser droplets surrounded by wider bands of finer droplets for comprehensive coverage.

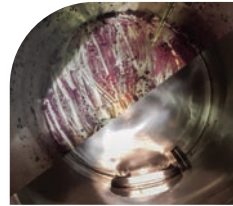
Dimensions



DOWNLOAD drawings at EXAIR.com

How do BETE's Stationary Tank Cleaning Nozzles Compare?

Stationary nozzles, also known as static nozzles, have no moving parts. The innovative low-maintenance geometries of the BETE HydroClaw and spiral TW provide sizable free passage superior to standard static spray balls. Both designs deliver an impressive rinsing action and are ideal for light to moderate soil types.



Before and after cleaning fermentation tanks at a premier winery using BETE's HydroClaw.



HydroClaw (HC) Flow Rates and Dimensions

Pattern: Tank Washing		Spray Angle: 360°	Material: 316L Stainless Steel											
Connection Type	Model	Spray Angle	Flow Rate (GPM @ PSI)				Dimensions (in)					Free Pass G	Wt (oz)	Coverage Dia (ft) @ 30 PSI
3/4 FNPT	6193685	360°	25 PSI	30 PSI	35 PSI	40 PSI	A	B	D	E	F	0.25	15	8
1 Tube Clip-On	6193688		33.4	36.6	39.5	42.0	2.38	3.59					14	
1 1/2 Tube Clip-On	6195965		35.7	38.9	42.0	44.8		3.59	0.75	0.16	1.00		18	
			35.7	38.9	42.0	44.8		4.00	0.75	0.16	1.50	0.25		

HydroClaw (HC) Flow Rates and Dimensions

Pattern: Tank Washing		Spray Angle: 360°	Material: 316L Stainless Steel											
Connection Type	Model	Spray Angle	Flow Rate (L/min @ BAR)				Dimensions (mm)					Free Pass G	Wt (g)	Coverage Dia (m) @ 2 BAR
3/4 FNPT	6193685	360°	1.5 BAR	2 BAR	2.5 BAR	3 BAR	A	B	D	E	F	6.4	416	2.4
1 Tube Clip-On	6193688		119	136	152	166	60.5	91.2					391	
1 1/2 Tube Clip-On	6195965		125	145	161	176		91.2	19.1	4.1	25.4		504	
			125	145	161	176		102	19.1	4.1	38.1			

Clip-on flow rates may vary depending on actual O.D. of installation tube or pipe.

Tank Washing (TW) Flow Rates and Dimensions

Pattern: Tank Washing		Spray Angle: See below		Material: 316 Stainless Steel																	
Male Inlet Connection	Model	Spray Angle	K Factor	Flow Rate (GPM @ PSI)										Approx Orifice Dia (in)	Approx Free Passage Dia (in)	Dimensions (in)			Wt (oz)	Scrubbing Dia (ft) @ 30-40 PSI	Rinsing Dia (ft) @ 30-40 PSI
				10 PSI	20 PSI	30 PSI	40 PSI	50 PSI	60 PSI	80 PSI	100 PSI	200 PSI	400 PSI			A	B	C			
3/8 NPT Model	6096905	180°	0.949	3.00	4.24	5.20	6.00	6.71	7.35	8.49	9.49	13.4	19.0	0.19	0.13	2.88	0.75	1.75	1.3	2.5	
1/2 NPT Model	6154176	270°	3.81	12.1	17.0	20.9	24.1	26.9	29.5	34.1	38.1	53.9	76.2	0.41	0.17	0.88	4.25	6.4	4.0	9.0	

Flow Rate L/GPM = K √PSI

Tank Washing (TW) Flow Rates and Dimensions

Pattern: Tank Washing		Spray Angle: See below		Material: 316 Stainless Steel													
Male Inlet Connection	Model	Spray Angle	K Factor	Flow Rate (L/min @ BAR)						Approx Orifice Dia (mm)	Approx Free Passage Dia (mm)	Dimensions (mm)			Wt (g)	Scrubbing Dia (mm) @ 2-3 BAR	Rinsing Dia (mm) @ 2-3 BAR
				0.7 BAR	1 BAR	2 BAR	3 BAR	4 BAR	5 BAR			A	B	C			
3/8 NPT Model	6096905	180°	13.7	11.4	13.7	19.3	23.7	27.3	30.6	4.83	3.30	73.0	17.5		49.6	380	760
1/2 NPT Model	6154176	270°	54.9	46.0	54.9	77.7	95.1	110	123	10.4	4.32	22.2	108		181	1200	2700

Flow Rate L/Min = K √BAR

Rotating Tank Cleaning Nozzles

HydroWhirl® Stinger (HWS2) & HydroWhirl® Mini (HWM)



Series: HydroWhirl Stinger (HWS)
Materials: 316L Stainless Steel,
Ceramic Bearings



Series: HydroWhirl Mini (HWM)
Materials: 316L Stainless Steel,
PEEK Slide-Bearing

BETE's rotating tank washing nozzles deliver up to 40% water savings compared to traditional static spray balls.

Rotational tank cleaning devices offer precise and reliable cleaning to prevent batch contamination.

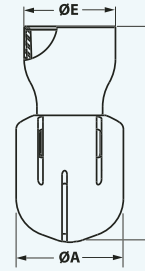
HWS Models

This compact, rotating tank cleaning nozzle is made from FDA-compliant 316L Stainless Steel and has a 32 Ra surface finish, making it ideal for many sanitary applications. The HWS2's patent-pending, no-weld design features Zirconia ceramic bearings for extended service life and extreme chemical resistance. Suitable for small to medium-sized tanks, it produces vigorous spray action with complete 360° spray coverage.

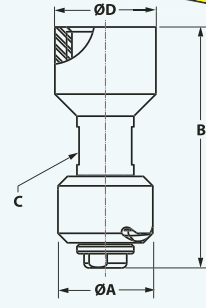
HWM Models

A fluid-driven, self-flushing compact rotary tank cleaning nozzle made from FDA-compliant 316L Stainless Steel with PEEK slide bearings for greater longevity and minimal maintenance. Suitable for small tanks up to 6.5 ft (2 m) in diameter, this compact nozzle creates vigorous spray action with complete 360° spray coverage.

Dimensions



HWS2



HWM



What are the Benefits of Reactionary Force Tank Cleaning Nozzles?

Rotating tank cleaning nozzles generate rotation using the force of the cleaning fluid. They provide more mechanical force than traditional static spray balls, resulting in faster, more effective cleaning. This leads to significant resource savings and increased production.



BETE
Nozzles

HydroWhirl® Stinger (HWS) Flow Rates and Coverage										Dimensions for Metal Only (in)					
Pattern: Tank Washing		Spray Angle: 360°		Material: 316L Stainless Steel Body, Ceramic Bearings						Pipe Size	A	B	E	Wt (oz)	Min Tank Entry Dia
Female Inlet Connection	Model	Spray Angle	Flow Rate (GPM) @ Differential Pressure (PSI)						Max Free Passage (in)	Coverage Dia (ft)					
1/8 FNPT Model	6212052	360°	10 PSI	20 PSI	30 PSI	40 PSI	50 PSI	60 PSI	0.025	2					
	6212051		2.05	2.86	3.48	4.00	4.46	4.87	0.039	7					
3/8 FNPT Model	6211903		4.94	7.03	8.64	10.0	11.2	12.3	0.024	8					
	6211905		8.59	12.1	14.8	17.0	19.0	20.8	0.079	10					
1/2 FNPT Model	6211907		10.2	14.3	17.4	20.0	22.3	24.3	0.039	10					
	6211902		12.9	18.3	22.5	26.0	29.1	31.9	0.064						

HydroWhirl® Stinger (HWS) Flow Rates and Coverage										Dimensions for Metal Only (mm)					
Pattern: Tank Washing		Spray Angle: 360°		Material: 316L Stainless Steel Body, Ceramic Bearings						Pipe Size	A	B	E	Wt (g)	Min Tank Entry Dia
Female Inlet Connection	Model	Spray Angle	Flow Rate (L/min) @ Differential Pressure (BAR)						Max Free Passage (mm)	Coverage Dia (m)					
1/8 FNPT Model	6212052	360°	0.7 BAR	1 BAR	2 BAR	3 BAR	4 BAR		0.64	0.6					
	6212051		7.80	9.27	13.0	15.8	18.1		0.99	2					
3/8 FNPT Model	6211903		18.8	22.6	32.1	39.5	45.7		0.61	2					
	6211905		32.8	39.1	54.9	67.1	77.3		2.00	3					
1/2 FNPT Model	6211907		39.0	46.3	64.8	78.9	90.6		0.99	3					
	6211902		49.0	58.8	83.6	103	119		1.63						

Flow Rate L/min = $K \sqrt{\text{BAR}}$

HydroWhirl® Mini (HWM) Flow Rates and Coverage										Dimensions for Metal Only (in)					
Pattern: Tank Washing		Spray Angle: 360°		Material: 316L Stainless Steel Body, PEEK Slide-Bearings						Pipe Size	A	B	C	D	Wt (oz)
Female Inlet Connection	Model	Spray Angle	Flow Rate (GPM) @ Differential Pressure (PSI)						Max Free Passage (in)	Coverage Dia (in)					
3/8 FNPT Model	6208384	360°	10 PSI	20 PSI	30 PSI	40 PSI	50 PSI	60 PSI	0.06	6					
			3.64	5.22	6.45	7.50	8.43	9.27							

HydroWhirl® Mini (HWM) Flow Rates and Coverage										Dimensions for Metal Only (mm)					
Pattern: Tank Washing		Spray Angle: 360°		Material: 316L Stainless Steel Body, PEEK Slide-Bearings						Pipe Size	A	B	C	D	Wt (g)
Female Inlet Connection	Model	Spray Angle	Flow Rate (L/min) @ Differential Pressure (BAR)						Max Free Passage (mm)	Coverage Dia (m)					
3/8 FNPT Model	6208384	360°	0.7 BAR	1 BAR	2 BAR	3 BAR	4 BAR		1.52	2					
			13.9	16.7	24.0	29.7	34.5								

Flow Rate L/min = $K \sqrt{\text{BAR}}$



11510 Goldcoast Drive • Cincinnati, OH 45249-1621 • Phone (513) 671-3322
FAX (513) 671-3363 • E-mail: techhelp@exair.com • www.exair.com



Rotating Tank Cleaning Nozzles

HydroWhirl® Poseidon (HWP) & HydroWhirl® Disc (HWD)



Series: HydroWhirl Poseidon (HWP)
Material: PTFE, 316L Stainless Steel Retaining Clip



Series: HydroWhirl Disc (HWD)
Materials: 316L Stainless Steel, PTFE Slide Bearing

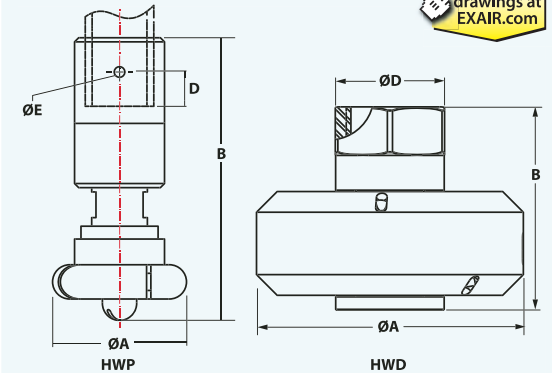
HWP Models

Manufactured from FDA-compliant, corrosion-resistant PTFE, the HWP rotating spray nozzle is highly versatile, making it ideal for Clean-In-Place (CIP) applications in the food and beverage industry and for use in harsh chemical processing environments. Its slow-spinning design delivers longer spray dwell times on target surfaces, resulting in greater cleaning impact.

HWD Models

BETE's HWD spray nozzle is a powerful, fully submersible rotating tank cleaner designed for cleaning small to medium-sized tanks. This rotary head is fluid-driven and self-flushing for minimal maintenance. Its 360° spray pattern produces high-impact washing with consistent repetition to clean the tank effectively and efficiently.

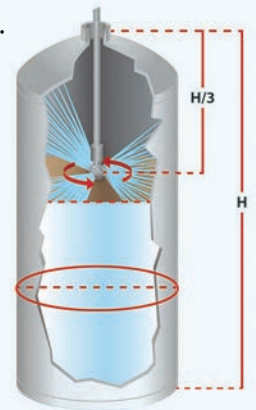
Dimensions



Guideline for nozzle placement:

(H/3) Nozzle =
1/3 Overall Tank Height (H).

Ideal nozzle placement is approximately 1/3 the height from the top of the tank.



The HWP stands out as one of the only rotary tank cleaners on the market constructed of 100% PTFE. PTFE is extremely corrosion-resistant and has one of the lowest friction coefficients of any material.

The unique HWD can be completely submerged in the tank and effectively cleans small to medium-sized tanks.

HydroWhirl Poseidon (HWP) Flow Rates and Dimensions

Pattern: Tank Washing Spray Angle: 360° Material: PTFE Nozzle, 316L Stainless Steel Retaining Clip

Connection Type	Model	Spray Angle	Flow Rate (GPM @ PSI)						Dimensions (in)				Wt (oz)	Coverage Dia (ft) @ 40 PSI
			10 PSI	20 PSI	30 PSI	40 PSI	50 PSI	60 PSI	A	B	D MAX	E		
1/2 FNPT	6174366	360°	4.45	6.31	7.75	8.96	10.0	11.0	1.68	3.94	0.50	0.09	3	9
1 Tube Clip-On	6182138		10.7	15.2	18.6	21.5	24.0	26.3	1.95	4.12	0.50	0.16	4	14

HydroWhirl Poseidon (HWP) Flow Rates and Dimensions

Pattern: Tank Washing Spray Angle: 360° Material: PTFE Nozzle, 316L Stainless Steel Retaining Clip

Connection Type	Model	Spray Angle	Flow Rate (L/min @ BAR)						Dimensions (mm)				Wt (g)	Coverage Dia (m) @ 2.8 BAR
			0.5 BAR	1 BAR	1.5 BAR	2 BAR	3 BAR	4 BAR	A	B	D MAX	E		
1/2 FNPT	6174366	360°	14.3	20.3	24.9	28.8	35.4	40.9	42.7	100.1	12.7	2.4	85.0	2.7
1 Tube Clip-On	6182138		34.6	49.0	60.0	69.3	84.9	98.0	49.5	104.6	12.7	4.1	113	4.3

NOTE: Flow rates represent threaded connections with a 360° spray angle. Flow rates may vary slightly for clip-on connections.

HydroWhirl® Disk (HWD) Flow Rates and Coverage

Pattern: Tank Washing Spray Angle: 360° Material: 316L Stainless Steel Body, PEEK Slide-Bearing

Female Inlet Connection	Model	Spray Angle	Flow Rate (GPM) @ Differential Pressure (PSI)						Max Free Passage (in)	Coverage Dia @ 40 PSI (ft)
			10 PSI	20 PSI	30 PSI	40 PSI	50 PSI	60 PSI		
1 FNPT	6211162	360°	25.3	35.5	43.4	50.0	55.8	61.1	0.13	11

HydroWhirl® Disk (HWD) Flow Rates and Coverage

Pattern: Tank Washing Spray Angle: 360° Material: 316L Stainless Steel Body, PEEK Slide-Bearing

Female Inlet Connection	Model	Spray Angle	Flow Rate (L/min) @ Differential Pressure (BAR)						Max Free Passage (mm)	Coverage Dia @ 2 BAR (m)
			0.7 BAR	1 BAR	2 BAR	3 BAR	4 BAR			
1 FNPT	6211162	360°	96.3	115	162	198	227	3.30	3	

Dimensions (in)

Pipe Size	A	B	D	Wt (oz)
1 FNPT	3.88	2.94	1.56	41

Dimensions (mm)

Pipe Size	A	B	D	Wt (g)
1 FNPT	98.4	74.8	40.6	1162