EXAIR®

MANUFACTURING INTELLIGENT COMPRESSED AIR PRODUCTS SINCE 1983



COAT



COOL



CONSERVE



CLEAN



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

TECHELP 1-800-903-9247 DIRECT

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



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



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



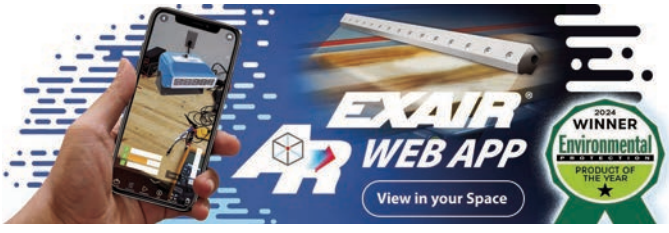
Make social connections

- 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.



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



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

Terms and Conditions 4
Efficiency Lab 5



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



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



Air Wipes
Blowoff, dry, clean and cool pipe, cable, extruded shapes and hose
- Super Air Wipes 38
- Standard Air Wipes 42



Air Amplifiers
Vent, exhaust, cool, dry and clean - with no moving parts
- Super Air Amplifiers 46
- Adjustable Air Amplifiers 50



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



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



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



Liquid Atomizing Spray Nozzles
Stainless-steel nozzles to atomize pressured liquids. No air required.
- OmniStream Cone Nozzles, 1/4 NPT 98
- OmniStreamCone 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



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

ORDER BY 2 PM SHIPS SAME DAY

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.

VISA MasterCard DISCOVER NOVUS AMERICAN EXPRESS Cards

ICC (International Chamber of Commerce) INCOTERM 2020: EX WORKS (EXAIR, 11510 Goldcoast Dr., Cincinnati, Ohio 45249, USA.)

Delivery 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 L-4439, Columbus, Ohio 43260-4439

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 techelp@exair.com.

Built to Last 5 yr. WARRANTY

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

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.

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: techelp@exair.com
Web Site: www.exair.com

An INTELLIGENT COMPRESSED AIR® Product

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.

energy ENERGY STAR PARTNER

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.

Air Nozzles and Jets

Engineered Air Nozzles and Jets reduce noise levels and air costs.

"Go Green" by upgrading your blowoff, cooling and drying operation to award winning Super Air Nozzles!



Built to Last 5 yr. WARRANTY
See our Terms & Conditions



What Are Air Nozzles and Jets?

A simple solution to reduce excessive air consumption and noise levels on compressed air blowoff operations. EXAIR Air Nozzles and Jets produce outlet flows up to 25 times compressed air consumption using a small amount of compressed air as the power source. Many power companies now provide attractive rebates to plants who switch to engineered Super Air Nozzles!

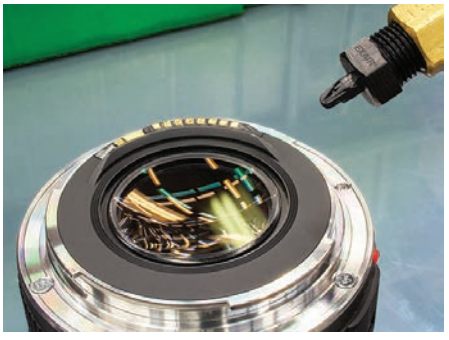
Why Air Nozzles and Jets?

Air savings, compared to open copper tubes or pipes commonly used for blowoff, can be as high as 80%. Less compressed air means less noise. The typical noise level reduction is 10 dBA. All EXAIR Air Nozzles and Jets meet Occupational Safety and Health Administration (OSHA) maximum dead end pressure and sound level exposure requirements and carry the CE mark.

An open 1/4" (6mm) copper tube, by contrast, ejects pure compressed air **at up to 40 SCFM (1,133 SLPM), the entire output of a 10 horsepower compressor. Annual energy cost can exceed $1,000 per year. Noise levels in excess of 100 dBA are commonly produced.** When supply pressure exceeds 30 PSIG (2 BAR), an open pipe, tube or drilled holes violates OSHA static pressure requirements.



Flexible Stay Set Hoses™ are ideal where frequent repositioning of air nozzles is required.



This PEEK material Atto Super Air Nozzle was chosen because of its non-marring quality for a blowoff application on a sensitive lens.

Applications

- Part cleaning
- Chip removal
- Part drying
- Liquid blowoff
- Part cooling
- Material conveying
- Part ejection
- Fiber conveying
- Air assist

Advantages

- Reduced compressed air cost
- 10 dBA average noise reduction
- Conserve compressed air
- Improved blowoff performance
- Compact
- Improved safety
- Meets OSHA noise level requirements
- Meets OSHA pressure requirements
- Improved production

Safe And Efficient Use Of Compressed Air

The inefficient use of compressed air for blowoff applications may create problems due to the energy costs, noise level and potential danger to personnel who are exposed to high pressure air. Open air pipes, copper tubes and drilled pipes are a few of the common abusers. They consume tremendous amounts of energy and often produce noise levels over 100 dBA.

Open Air Pipe or Copper Tube



Turbulent compressed air blasts straight out of the pipe or tube. It not only wastes huge amounts of compressed air but also violates OSHA noise and dead end pressure requirements.

Reduce Energy Costs

The best way to cut energy costs is through proper maintenance and use of the compressed air system. Leaks and dirty filters require maintenance on a regular basis. Energy savings can also be realized when replacing outdated compressor motors and controls with high efficiency models that often pay for themselves in a short period of time.

The most important factor to dramatically boost efficiency is proper use. Using engineered products like EXAIR's Super Air Nozzles can cut operating costs since they use only a fraction of the compressed air of typical blowoffs. In addition, all of the Air Nozzles and Jets shown in this catalog can be cycled on and off with an instantaneous response. EXAIR's EFC (shown on page 7) is an electronic flow control that limits compressed air use by turning on the air only when a part is present.

Reduce Noise Levels

High noise levels are a common problem for many plants. Compressed air noise often exceeds OSHA noise level exposure requirements, resulting in hearing loss to those working in close proximity. Noisy blowoffs at 80 PSIG (5.5 BAR) that produce noise levels of 100 dBA can be reduced to only 74 dBA when using a Super Air Nozzle. At that pressure, it is still possible to obtain hard-hitting force without the high noise.

OSHA Maximum Allowable Noise Exposure							
Hours per day (constant noise)	8	7	4	3	2	1	0.5
Sound level dBA	90	91	95	97	100	105	110

OSHA Standard 29 CFR - 1910.95 (a)

Eliminate Harmful Dead End Pressures

Air can be dangerous when the outlet pressure of a hole, hose or copper tube is higher than 30 PSIG (2 BAR). In the event the opening is blocked by a hand or other body part, air may enter the bloodstream through the skin, resulting in a serious injury. All of the Air Nozzles and Jets manufactured by EXAIR have been designed for safety. All are safe to be supplied with higher pressure compressed air and meet OSHA Standard 29 CFR 1910.242(b).

Air Consumption of Open Tube And Pipe

Pressure Supply			Air Consumption of Homemade Blowoffs					
			Copper Tube			Open Pipe		
PSIG	BAR		1/4"	5/16"	3/8"	1/8"	1/4"	3/8"
80	5.5	SCFM	33	58	87	70	140	240
		SLPM	934	1,641	2,462	1,981	3,962	6,792

Saving Money and Compressed Air

The table above shows the air consumption for typical homemade blowoffs. The pages that follow give the air consumption and other data on EXAIR's Air Nozzles and Jets.

Consider the following example where a Model 1102 Mini Super Air Nozzle replaces an 1/8" open pipe. The compressed air savings are easy to calculate and prove to be dramatic. Payout for Air Nozzles and Jets, including filter and installation cost is measured in weeks - not years, as is the case for other cost reduction equipment. Based on a 40 hour work week, 52 weeks a year.

Example:

1. Existing blowoff is 1/8" open pipe at 80 PSIG (5.5 BAR) supply. Air consumption, from the table above, is 70 SCFM (1,981 SLPM).
2. Use a 1/8 FNPT Model 1102 Mini Super Air Nozzle also at 80 PSIG (5.5 BAR) supply. Air consumption, from the table on page 54, is 10 SCFM (283 SLPM).
3. Compressed air saved = 70 - 10 = 60 SCFM (1,981 - 283 =1,698 SLPM)
4. For this example, the blowoff is continuous. If the duty cycle was 20%, then air saved would be 60 × .2 = 12 SCFM (1,698 × .2 = 340 SLPM).
5. Most large plants know their cost per 1,000 standard cubic feet of compressed air (10,000 standard liters). If you don't know your actual cost per 1,000 SCF, $0.25 is a reasonable average to use. (Cost per 10,000 standard liters is approximately $0.089.)
6. Dollars saved per hour = SCFM saved × 60 minutes × cost/1,000 SCF (SLPM saved × 60 min × cost/10,000 SL)
   = 60 × 60 × $0.25/1,000 (= 1,698 × 60 × $0.089/10,000)
   = $0.90/hour
   = $0.90/hr. is $36.00/week and
   = $1,872.00/year savings ***for One nozzle!***

Air Nozzles

How Air Nozzles Work



Air Nozzles use the Coanda effect to amplify compressed airflow up to 25 times or more. As illustrated on the left, compressed air (black arrows) is ejected through a series of nozzles on the outer perimeter. As the air travels along the outer wall of the nozzle, surrounding air (blue arrows) is entrained into the stream. The airstream that results is a high volume, high velocity blast of air **at minimal consumption.** The air is always ejected so it can vent safely, **well below OSHA dead end pressure requirements**, should the nozzle end be blocked.

Selecting The Right Air Nozzle

EXAIR manufactures a wide selection of Air Nozzles and Jets, which are divided into two groups. The first group includes Air Nozzles and Jets that deliver force up to 22 ounces (624 grams) and are suitable for most applications. The second group includes Air Nozzles that produce high force up to 23 lbs (10.43 kg) where additional reach and force are required.

- **Type 303 Stainless Steel-** high temperatures and corrosive environments. Max temp 800°F (426°C)
- **Type 316 Stainless Steel-** high temperatures, corrosive environments, and mechanical wear. Max temp 1000°F (538°C)
- **Brass-** general purpose applications. Max temp 400°F (204°C)
- **Zinc aluminum alloy-** general purpose applications. Max temp 250°F (121°C)
- **PEEK-** replaces metals in harsh environments. Offers chemical resistance, non-marring. Max temp 320°F (160°C)

Air Nozzles And Jets Comparison (sorted by compressed air consumption at 80 PSIG (5.5 BAR))

Model	Material	Description	Inlet	Air Consumption		Force		Sound Level dBA	More Details
				SCFM	SLPM	Ozs	Grams		
1108SS	Stainless Steel - Type 316	Atto Super Air Nozzle	M4 x 0.5	2.5	71	2.0*	57	58	p. 55
1108-PEEK	PEEK (Plastic)	Atto Super Air Nozzle	M4 x 0.5	2.5	71	2.0*	57	58	p. 55
1108SS-NPT	Stainless Steel - Type 316	Atto Super Air Nozzle	1/8 MNPT	2.5	71	2.0*	57	58	p. 55
1108-PEEK-NPT	PEEK (Plastic)	Atto Super Air Nozzle	1/8 MNPT	2.5	71	2.0*	57	58	p. 55
1109SS	Stainless Steel - Type 316	Pico Super Air Nozzle	M5 x 0.5	4.9	139	5.0*	142	68	p. 55
1109-PEEK	PEEK (Plastic)	Pico Super Air Nozzle	M5 x 0.5	4.9	139	5.0*	142	68	p. 55
1109SS-NPT	Stainless Steel - Type 316	Pico Super Air Nozzle	1/8 MNPT	4.9	139	5.0*	142	68	p. 55
1109-PEEK-NPT	PEEK (Plastic)	Pico Super Air Nozzle	1/8 MNPT	4.9	139	5.0*	142	68	p. 55
1110SS	Stainless Steel - Type 316	Nano Super Air Nozzle	M6 x 0.75	8.3	235	8.1*	230	75	p. 55
1110-PEEK	PEEK (Plastic)	Nano Super Air Nozzle	M6 x 0.75	8.3	235	8.1*	230	75	p. 55
1110SS-NPT	Stainless Steel - Type 316	Nano Super Air Nozzle	1/8 MNPT	8.3	235	8.1*	230	75	p. 55
1110-PEEK-NPT	PEEK (Plastic)	Nano Super Air Nozzle	1/8 MNPT	8.3	235	8.1*	230	75	p. 55
1001	Brass	Safety Air Nozzle	1/8 FNPT	10	283	9*	255	78	p. 60
1102	Zinc Aluminum alloy	Mini Super Air Nozzle	1/8 FNPT	10	283	9*	255	71	p. 56
1102-PEEK	PEEK (Plastic)	Mini Super Air Nozzle	1/8 FNPT	10	283	9*	255	71	p. 56
1102SS	Stainless Steel - Type 316	Mini Super Air Nozzle	1/8 FNPT	10	283	9*	255	71	p. 56
1103	Zinc Aluminum alloy	Mini Super Air Nozzle	1/8 MNPT	10	283	9*	255	71	p. 56
1103SS	Stainless Steel - Type 316	Mini Super Air Nozzle	1/8 MNPT	10	283	9*	255	71	p. 56
1126	Zinc Aluminum alloy	1" Flat Super Air Nozzle	1/8 FNPT	10.5	297	9.8†	278	75	p. 57
1126SS	Stainless Steel - Type 316	1" Flat Super Air Nozzle	1/8 FNPT	10.5	297	9.8†	278	75	p. 57
1010SS	Stainless Steel - Type 303	Micro Air Nozzle	1/8 MNPT	13	368	12*	340	80	p. 55
1009	Aluminum	Adjustable Air Nozzle	1/8 MNPT	13	368	12**	340	79	p. 60
1009SS	Stainless Steel - Type 303	Adjustable Air Nozzle	1/8 MNPT	13	368	12**	340	79	p. 60
1100	Zinc Aluminum alloy	Super Air Nozzle	1/4 FNPT	14	396	13*	369	74	p. 56
1100-PEEK	PEEK (Plastic)	Super Air Nozzle	1/4 FNPT	14	396	13*	369	74	p. 56
1100SS	Stainless Steel - Type 316	Super Air Nozzle	1/4 FNPT	14	396	13*	369	74	p. 56
1101	Zinc Aluminum alloy	Super Air Nozzle	1/4 MNPT	14	396	13*	369	74	p. 56
1101SS	Stainless Steel - Type 316	Super Air Nozzle	1/4 MNPT	14	396	13*	369	74	p. 56
1002	Brass	Safety Air Nozzle	1/4 FNPT	17	481	16*	454	80	p. 60
1002SS	Stainless Steel - Type 303	Safety Air Nozzle	1/4 FNPT	17	481	16*	454	80	p. 60
1003	Brass	Safety Air Nozzle	3/8 FNPT	18	509	18*	510	83	p. 60
6019	Brass	Adjustable Air Jet	1/8 MNPT	18	509	16***	454	83	p. 61
6019SS	Stainless Steel – Type 303	Adjustable Air Jet	1/8 MNPT	18	509	16***	454	83	p. 61
6013	Brass	High Velocity Air Jet	1/8 MNPT	22	622	20†	567	82	p. 61
6013SS	Stainless Steel – Type 303	High Velocity Air Jet	1/8 MNPT	22	622	20†	567	82	p. 61
1122	Zinc Aluminum alloy	2" Flat Super Air Nozzle	1/4 FNPT	22	622	22†	624	77	p. 57
1122SS	Stainless Steel - Type 316	2" Flat Super Air Nozzle	1/4 FNPT	22	622	22†	624	77	p. 57
1144	Zinc Aluminum/Steel	2" Super Air Scraper	1/4 FNPT	22	622	22†	624	77	p. 57
1004SS	Stainless Steel - Type 316	Back Blow Air Nozzle	M4 x 0.5	4.5	127	NA	NA	75	p. 59
1006SS	Stainless Steel - Type 316	Back Blow Air Nozzle	1/4 FNPT	22	622	NA	NA	80	p. 59

For High Force Air Nozzles, see page 63.

FNPT = NPT Female
MNPT = NPT Male.

* Force measured at 12" (305mm) from target.
** Force measured at 12" (305mm) from target with a .008" (0.20mm) factory setting.
*** Force measured at 12" (305mm) from target with a .006" (0.15mm) factory setting.

All sound levels measured at 3 feet (914mm).
All measurements taken at 80 PSIG (5.5 BAR).
† Force measured at 12" (305mm) from target with a .015" (0.38mm) shim installed.

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

An INTELLIGENT COMPRESSED AIR® Product

Atto Super Air Nozzles™


(actual size)

Model 1108SS M4 x 0.5
Material: Type 316 Stainless Steel
Model 1108-PEEK M4 x 0.5
Material: PEEK (plastic)



Model 1108SS-NPT 1/8 NPT male
Material: Type 316 Stainless Steel
Model 1108-PEEK-NPT 1/8 NPT male
Material: PEEK (plastic)

Model 1108SS, 1108-PEEK, 1108SS-NPT, 1108-PEEK-NPT Atto Super Air Nozzle

EXAIR's Atto Super Air Nozzle delivers the smallest, most precise blowoff. The air pattern for this tiny nozzle is focused, measuring 1.0" in diameter when positioned 6" away from the surface. The 58 dBA noise level is a fraction of ordinary air nozzles.

Air Consumption		Force*		Sound Level
SCFM	SLPM	Ozs	Grams	dBA
2.5	71	2.0	57	58

* Force measured at 12" (305mm) from target.
Sound level measured at 3' (914mm).
All measurements taken at 80 PSIG (5.5 BAR).

Pico Super Air Nozzles™


(actual size)

Model 1109SS M5 x 0.5
Material: Type 316 Stainless Steel
Model 1109-PEEK M5 x 0.5
Material: PEEK (plastic)



Model 1109SS-NPT 1/8 NPT male
Material: Type 316 Stainless Steel
Model 1109-PEEK-NPT 1/8 NPT male
Material: PEEK (plastic)

Model 1109SS, 1109-PEEK, 1109SS-NPT, 1109-PEEK-NPT Pico Super Air Nozzle

EXAIR's Pico Super Air Nozzle delivers a precise blowoff with a highly focused, forceful blast of airflow. The narrowly focused air pattern measures 1.3" in diameter at 6" away from the surface. The noise level is only 68 dBA.

Air Consumption		Force*		Sound Level
SCFM	SLPM	Ozs	Grams	dBA
4.9	139	5.0	142	68

* Force measured at 12" (305mm) from target.
Sound level measured at 3' (914mm).
All measurements taken at 80 PSIG (5.5 BAR).

Nano Super Air Nozzles™


(actual size)

Model 1110SS M6 x 0.75
Material: Type 316 Stainless Steel
Model 1110-PEEK M6 x 0.75
Material: PEEK (plastic)



Model 1110SS-NPT 1/8 NPT male
Material: Type 316 Stainless Steel
Model 1110-PEEK-NPT 1/8 NPT male
Material: PEEK (plastic)

Model 1110SS, 1110-PEEK, 1110SS-NPT, 1110-PEEK-NPT Nano Super Air Nozzle

EXAIR's Nano Super Air Nozzle delivers a highly focused, forceful blast of airflow. The air pattern for this small nozzle measures 1.5" in diameter at 6" away from the surface. The noise level is a low 75 dBA. Overall length measures only 0.78".

Air Consumption		Force*		Sound Level
SCFM	SLPM	Ozs	Grams	dBA
8.3	235	8.1	230	75

* Force measured at 12" (305mm) from target.
Sound level measured at 3' (914mm).
All measurements taken at 80 PSIG (5.5 BAR).

Micro Air Nozzle™


(actual size)

Model 1010SS 1/8 NPT male
Material: Type 303 Stainless Steel

Model 1010SS Micro Air Nozzle

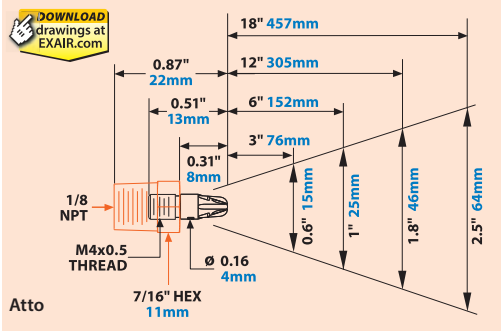
EXAIR's Micro Air Nozzle optimizes entrainment for a directed, high volume, high velocity airflow. The compact size permits mounting where space is limited. Sound level and air consumption are low.

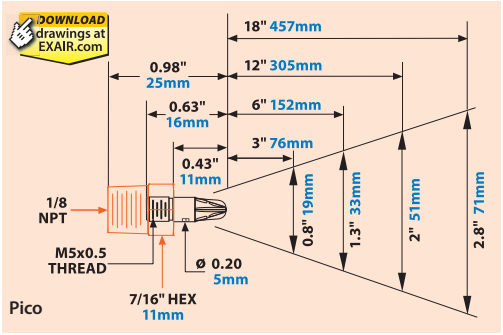
Air Consumption		Force*		Sound Level
SCFM	SLPM	Ozs	Grams	dBA
13	368	12	340	80

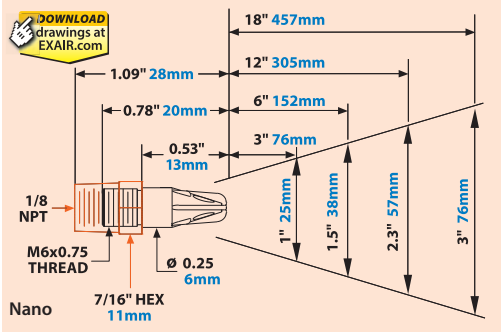
* Force measured at 12" (305mm) from target.
Sound level measured at 3' (914mm).
All measurements taken at 80 PSIG (5.5 BAR).

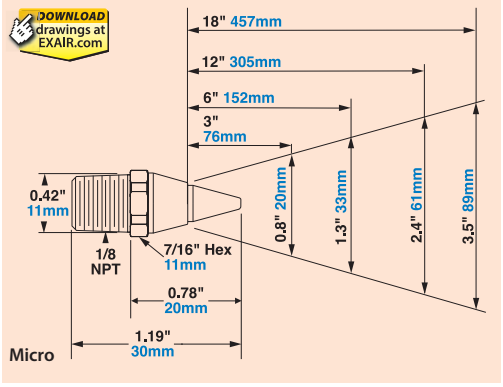
The Air Nozzles and Jets shown on pages 55 – 61 deliver up to 22 ounces (624 grams) of force, making them suitable for most applications. All models shown use a small amount of compressed air to entrain large volumes of surrounding room air. They have been engineered to provide the best performance with low sound levels and high efficiency.

Dimensions and Airflow Patterns









Air Nozzles

Mini Super Air Nozzles™



Model 1102 1/8 NPT female
Material: Zinc Aluminum alloy
Model 1102-PEEK 1/8 NPT female
Material: PEEK (plastic)
Model 1102SS 1/8 NPT female
Material: Type 316 Stainless Steel



Model 1103 1/8 NPT male
Material: Zinc Aluminum alloy
Model 1103SS 1/8 NPT male
Material: Type 316 Stainless Steel

Model 1102, 1102-PEEK, 1102SS, 1103 and 1103SS Mini Super Air Nozzles

The 1/8 NPT Mini Super Air Nozzles provide a forceful, concentrated stream of high velocity airflow. It has fewer holes than the larger Super Air Nozzles, resulting in lower sound levels, air consumption and force.

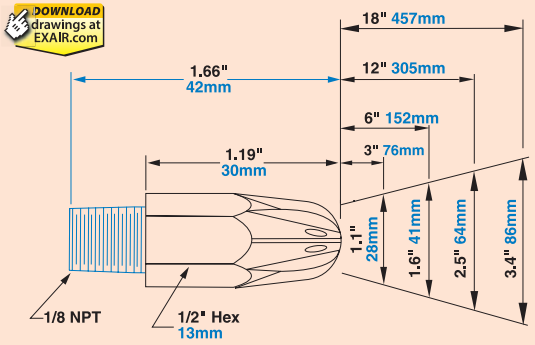
Air Consumption		Force*		Sound Level
SCFM	SLPM	Ozs	Grams	dBA
10	283	9	255	71

* Force measured at 12" (305mm) from target.
Sound level measured at 3' (914mm).
All measurements taken at 80 PSIG (5.5 BAR).



Super Air Nozzles with Stay Set Hoses provide adjustability and precision.

Dimensions and Airflow Pattern



Super Air Nozzles™



Model 1100 1/4 NPT female
Material: Zinc Aluminum alloy
Model 1100SS 1/4 NPT female
Material: Type 316 Stainless Steel



Model 1100-PEEK 1/4 NPT female
Material: PEEK (plastic)



Model 1101 1/4 NPT male
Material: Zinc Aluminum alloy
Model 1101SS 1/4 NPT male
Material: Type 316 Stainless Steel



The aerodynamic design of the Model 1100 Super Air Nozzle directs air to a single point of convergence.

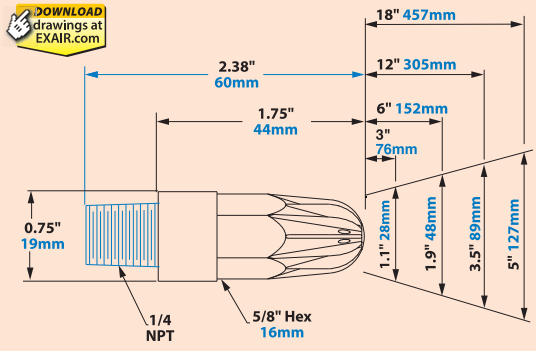
Model 1100, 1100SS, 1100-PEEK, 1101 and 1101SS Super Air Nozzles

EXAIR's award winning Super Air Nozzles deliver high performance suitable for a wide range of blowoff, drying and cooling applications. The aerodynamic design of this engineered Super Air Nozzle directs the air to a single point of convergence, delivering hard-hitting force. It dramatically reduces air consumption and, in many cases, can cut the noise level in half. All Super Air Nozzles eject the compressed air through holes located in recessed grooves that cannot be blocked or dead ended.

Air Consumption		Force*		Sound Level
SCFM	SLPM	Ozs	Grams	dBA
14	396	13	369	74

* Force measured at 12" (305mm) from target.
Sound level measured at 3' (914mm).
All measurements taken at 80 PSIG (5.5 BAR).

Dimensions and Airflow Pattern





Most EXAIR Air Nozzles have a standard hex base making them easy to install with a socket wrench.



Build Your Own System

EXAIR's Swivel Fittings, available for all our nozzles up to 1 NPT, make it easy to adjust the aim of the Air Nozzles and Jets. Correct placement of the blowing angle can help optimize performance, reduce noise levels and improve efficiency. See page 68 for details.

Swivel Fittings can be added to most EXAIR Nozzles by adding a "W" to the Model#.

1122 (2" Flat Super Air Nozzle)
+ W (Swivel Fitting)
1122W

An INTELLIGENT COMPRESSED AIR® Product

Flat Super Air Nozzles™



Model 1126 1/8 NPT female
Material: Zinc Aluminum alloy

Model 1126SS 1/8 NPT female
Material: Type 316 Stainless Steel

Shim sets for the 1" Flat Super Air Nozzles include a .005" (0.13mm), .010" (0.25mm), and .020" (0.51mm) thick shim.

1136SS	Stainless Steel 1" Flat Super Air Nozzle Shim Set

Model 1126, 1126SS, 1122 and 1122SS 1" and 2" Flat Super Air Nozzles

EXAIR's 1" and 2" Flat Super Air Nozzles are highly efficient, unique flat air nozzles. Their patented† design uses a special shim to maintain the critical position of the component parts. A precise amount of air is released through the thin slot, across a flat surface. The result is a wide, forceful stream of high velocity, laminar airflow with minimal air consumption and noise.

†Patent #5402938

	Air Consumption		Force *		Sound Level
Model	SCFM	SLPM	Ozs	Grams	dBA
1126/1126SS	10.5	297	9.8	278	75

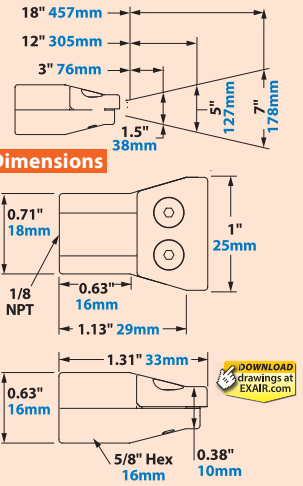
* Force measured at 12" (305mm) from target.
Sound level measured at 3' (914mm).
All measurements taken at 80 PSIG (5.5 BAR)
.015" (0.38mm) shim installed.

2013 Plant Engineering PRODUCT of the YEAR Gold Award

GOLDEN MOUSETRAP AWARDS 2013 FINALIST



1" Flat Super Air Nozzle Airflow Pattern





Model 1122 1/4 NPT female
Material: Zinc Aluminum alloy

Model 1122SS 1/4 NPT female
Material: Type 316 Stainless Steel

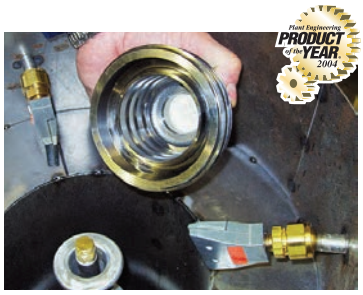
Shim sets for the 2" Flat Super Air Nozzles include a .005" (0.13mm), .010" (0.25mm), and .020" (0.51mm) thick shim.

1132SS	Stainless Steel 2" Flat Super Air Nozzle Shim Set

The 1" and 2" Flat Super Air Nozzles are shipped with a .015" (0.38mm) air gap opening that is set with a stainless steel shim positioned between the cap and the body. Force and flow may be easily increased or decreased by installing a different shim.

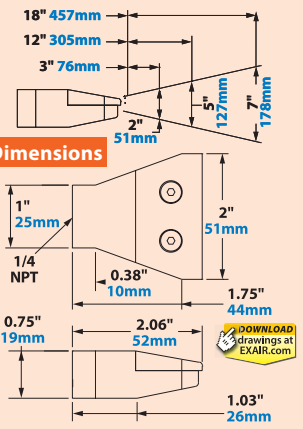
	Air Consumption		Force *		Sound Level
Model	SCFM	SLPM	Ozs	Grams	dBA
1122/1122SS	21.8	622	22	624	77

* Force measured at 12" (305mm) from target.
Sound level measured at 3' (914mm).
All measurements taken at 80 PSIG (5.5 BAR).
.015" (0.38mm) shim installed.



2" Flat Super Air Nozzles blow off metal parts as they are lifted through a vacuum chamber.

2" Flat Super Air Nozzle Airflow Pattern



Super Air Scraper™



Model 1144 1/4 NPT female
Material: Zinc Aluminum alloy/Steel

Shim sets for the 2" Flat Super Air Nozzles include a .005" (0.13mm), .010" (0.25mm), and .020" (0.51mm) thick shim.

1132SS	Stainless Steel 2" Flat Super Air Nozzle Shim Set

Model 1144 2" Super Air Scraper

EXAIR's 2" Super Air Scraper is a patented nozzle† used to eliminate stubborn debris from work or machine surfaces. This 2" flat nozzle utilizes a corrosion resistant scraper blade to provide the needed leverage to get underneath and scrape away fixed debris before the air can remove it from a surface. Applications include removal of tape, gaskets, adhesive, labels and stickers, grease, paint and sealant. A scraper nozzle can assist in cleaning sub plates, machining tables and difficult to sweep metal chips, flakes or discs. They are ideal when used as a Soft Grip Super Air Scraper (see page 123).

†Patent #10,779,698

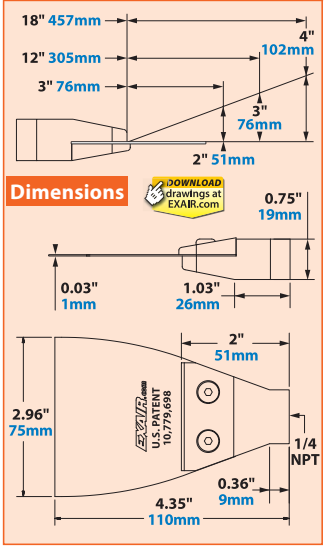
	Air Consumption		Force *		Sound Level
Model	SCFM	SLPM	Ozs	Grams	dBA
1144	21.8	622	22	624	77

* Force measured at 12" (305mm) from target.
Sound level measured at 3' (914mm).
All measurements taken at 80 PSIG (5.5 BAR).
.015" (0.38mm) shim installed.



2" Super Air Scraper can eliminate stubborn debris.

2" Super Air Scraper Airflow Pattern



†Patent #10,779,698

EXAIR Blows Away the Competition!



Save Over $1,200 Per Year By Replacing One Outdated Air Nozzle!

We've all seen flat air nozzles. Some are yellow. Others are orange. The oldest ones are blue or metal. Those other manufacturers want you to believe you'll save money by conserving compressed air while protecting your workers from harmful noise levels. In reality, those colorful air nozzles that blow the air out of holes consume enormous amounts of air. The plastic ones often break off. Some might even get you an OSHA fine due to the dangerous dead ended pressures that exist if someone blocks the air exhaust.

EXAIR's award winning **2" Flat Super Air Nozzle™** has been engineered to replace those outdated flat nozzles. There are no dangerous holes that can be blocked. EXAIR's patented, award winning design is efficient, maintaining a precise amount of airflow through a thin slot. The result is a forceful stream of high velocity, laminar airflow with minimal air consumption and noise. You can increase or decrease the force of each flat air nozzle – using shims to tune it to the application so you'll never waste compressed air. EXAIR also offers a **1" Flat Super Air Nozzle™,** with the same laminar airflow, to fit in tighter spaces.

Flat nozzles from other manufacturers can consume over 30 SCFM (a refrigerator sized compressor) and aren't adjustable. Some manufacturers offer different flow rates but you need to guess at which one will do the job since you can't adjust them once you've made the purchase. By default, most users feel bigger is better and go with the highest flow rate, wasting compressed air. See page 57 for more details.



EXAIR's 2" Flat Super Air Nozzle	Theirs (Old Technology)
• 2004 Product Of The Year Winner	• Can consume over 30 SCFM
• Your choice of zinc/aluminum or Type 316 stainless steel	• Expensive – metal or plastic
• Flexible Stay Set Hoses™, swivel fittings and magnetic bases are available	• No easy adjustment – wasted compressed air
• Meets or exceeds OSHA standards	• May not be OSHA safe
• Quietest flat nozzle available	• Significantly louder
• Easy to change the force and flow	• Plastic is easily broken

Here's how:

- One popular flat nozzle consumes 31 SCFM @ 80 PSIG.
- EXAIR's 2" Flat Super Air Nozzle with .015" shim consumes 21.8 SCFM @ 80 PSIG.
- 31 SCFM (theirs) – 21.8 SCFM (EXAIR's) = 9.2 SCFM compressed air saved.

Most large plants know their cost per 1,000 standard cubic feet of compressed air. If you don't know your actual cost per 1,000 SCF, 25¢ is a reasonable average to use.

- SCFM saved × 60 minutes × cost/1,000 SCF = dollars saved per hour.
- In this case, 9.2 SCFM × 60 × .25/1,000 SCF= ***13.8 cents saved per hour.***
- 13.8 cents per hour × 24 hours = ***$3.31 saved per day.***
- $3.31 per day × 365 days = ***$1,208.88 saved in one year*** (in this 24/7 operation).

And, This Savings Is For One Nozzle!

Air Nozzle	Air Consumption @ 80 PSIG	Noise Level dBA	lbs. of Force @ 80 PSIG
Yellow	29 SCFM	83	1.7
Orange	28 SCFM	82	1.7
Blue	26 SCFM	78	1.5
Metal (machined)	29 SCFM	82	1.7
Metal (cast)	31 SCFM	80	1.9
EXAIR 2" Flat Super Air Nozzle	***7.3- 30 SCFM**	**62-81**	**0.5 – 1.9**

*Air consumption dependent upon shim size.

EXAIR's 2" Flat Super Air Nozzle can pay for itself in less than 27 days.

Put the 2" Flat Super Air Nozzle to work in your blowoff, cooling or drying application. We're sure you'll agree that it blows away the competition!

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

An INTELLIGENT COMPRESSED AIR® Product

M4 Back Blow Air Nozzle



Model 1004SS M4 x 0.5
Material: Type 316 Stainless Steel

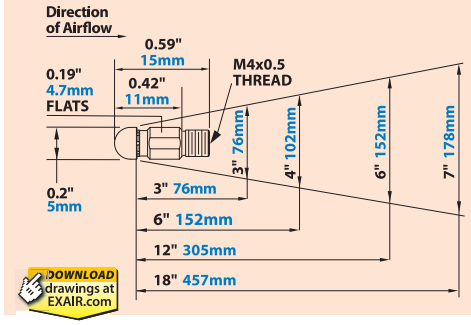
Model 1004SS Back Blow Air Nozzle

EXAIR's M4 Back Blow Air Nozzle delivers the smallest, most effective airflow for cleaning out small diameter tubes, pipes, channels or holes. Its forceful airflow can be used on diameters as small as 1/4" (6.3mm) and up to 1" (25.4mm). Extensions for reaching farther into a pipe, tube, hose, channel or hole are available.

	Air Consumption		Sound Level*	Use With:
Model	SCFM	SLPM	dBA	Inside Diameters
1004SS	4.5	127	75	1/4" - 1" (6.3-25.4mm)

* Sound level measured at 3' (914mm).
All measurements taken at 80 PSIG (5.5 BAR).

Dimensions and Airflow Pattern



1/4 NPT Back Blow Air Nozzle



Model 1006SS 1/4 NPT female
Material: Type 316 Stainless Steel

Model 1006SS Back Blow Air Nozzle

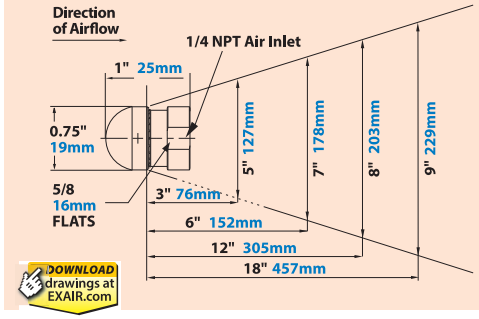
The 1/4 NPT Back Blow Air Nozzle delivers high performance suitable for a wide range of diameters. Recommended diameter range is 7/8"- 4" (22-102mm). A large variety of extensions for reaching farther into a pipe, tube, hose, channel or hole are available.

	Air Consumption		Sound Level*	Use With:
Model	SCFM	SLPM	dBA	Inside Diameters
1006SS	22	622	80	7/8"– 4" (22–102mm)

* Sound level measured at 3' (914mm).
All measurements taken at 80 PSIG (5.5 BAR).

2015 Plant Engineering PRODUCT of the YEAR Bronze Award

Dimensions and Airflow Pattern



1 NPT Back Blow Air Nozzle



Model 1008SS 1 NPT female
Material: Type 316 Stainless Steel

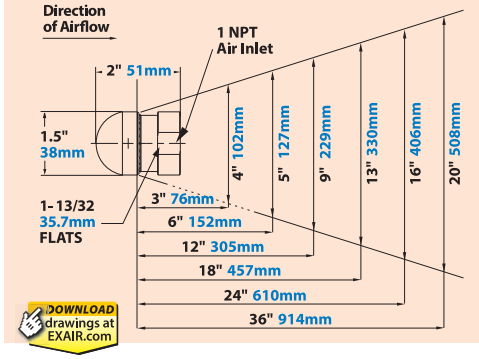
Model 1008SS Back Blow Air Nozzle

EXAIR's largest Back Blow Air Nozzle produces the greatest force for stubborn, sticky materials which may be inside of pipes, tubes, channels or holes. It is capable of reaching into diameters from 2"-16" (51-406mm) so it can handle small and large diameters. Extensions are available.

	Air Consumption		Sound Level*	Use With:
Model	SCFM	SLPM	dBA	Inside Diameters
1008SS	57	1,614	89	2" - 16" (51-406mm)

* Sound level measured at 3' (914mm).
All measurements taken at 80 PSIG (5.5 BAR).

Dimensions and Airflow Pattern



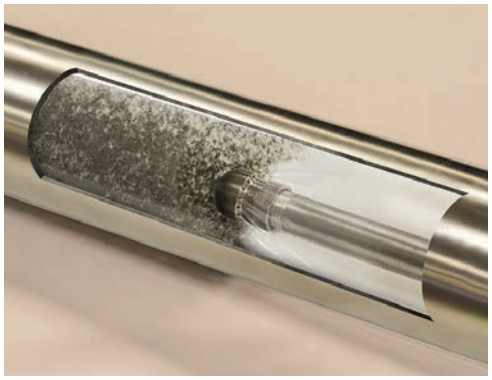
Aluminum Extension Pipe

Extensions provide the necessary reach to clean out your pipe, tube, hose or channel. Available up to 72" (1829mm) long.

Model	Description
9492	6" (152mm) Aluminum, M4 x 0.5
9493	12" (305mm) Aluminum, M4 x 0.5
9495	24" (610mm) Aluminum, M4 x 0.5
9497	36" (914mm) Aluminum, M4 x 0.5
9188	12" (305mm) Aluminum, 1/4 NPT
9189	18" (457mm) Aluminum, 1/4 NPT
9190	24" (610mm) Aluminum, 1/4 NPT
9191	36" (914mm) Aluminum, 1/4 NPT
9192	48" (1219mm) Aluminum, 1/4 NPT
9193	60" (1524mm) Aluminum, 1/4 NPT
9194	72" (1829mm) Aluminum, 1/4 NPT
900353	12" (305mm) Aluminum, 1 NPT
901254	36" (914mm) Aluminum, 1 NPT
901259	72" (1829mm) Aluminum, 1 NPT



Chip Shields should be used to protect operators from debris. A Model 901650 Chip Shield is for M4 x 0.5 extensions and a Model 901222 is available for 1/4 NPT extensions.



A Back Blow Air Nozzle cleans chips and coolant from inside a machined pipe.

Safety Air Nozzles

Safety Air Nozzles



Model 1001 1/8 NPT female
Material: Brass

Model 1002 1/4 NPT female
Material: Brass

Model 1002SS 1/4 NPT female
Material: Type 303 Stainless Steel

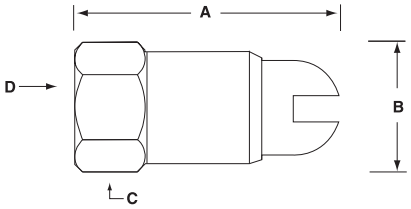
Model 1003 3/8 NPT female
Material: Brass



Oddly shaped parts often require a combination of Safety Nozzles for blowoff.

Model 1001, 1002, 1002SS and 1003 Safety Air Nozzles

Safety Air Nozzles eject a small amount of compressed air 360° around the outer ring that combines with the air ejected from the center hole to produce a high volume, high velocity blast of air. The slotted end allows air to vent safely should the nozzle end be blocked.



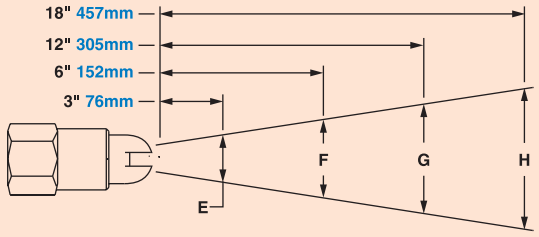
Air Consumption			Force*		Sound Level
Model	SCFM	SLPM	Ozs	Grams	dBA
1001	10	283	9	255	78
1002	17	481	16	454	80
1002SS	17	481	16	454	80
1003	18	509	18	510	83

* Force measured at 12" (305mm) from target.
Sound level measured at 3' (914mm).
All measurements taken at 80 PSIG (5.5 BAR).

Dimensions		A	B	C	D
Model				Hex	Inlet
1001	in	1.19	0.38	1/2	1/8 NPT
	mm	30	10	13	
1002 1002SS	in	1.44	0.50	5/8	1/4 NPT
	mm	37	13	16	
1003	in	1.65	0.63	3/4	3/8 NPT
	mm	42	16	19	

Airflow Pattern

DOWNLOAD drawings at EXAIR.com



Model		E	F	G	H
1001	in	1.1	2.1	4.1	6.0
	mm	28	53	104	152
1002 1002SS	in	1.3	2.3	4.4	6.5
	mm	33	58	112	165
1003	in	1.3	2.4	4.7	7.0
	mm	33	61	119	178

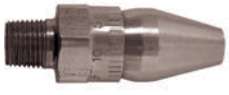
EXAIR® EFFICIENCYLAB

Contact an Application Engineer at 1-800-903-9247.

Send in your air nozzle for the Award Winning EXAIR Efficiency Lab Service

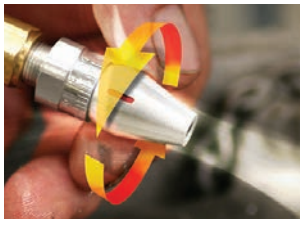
We will test your existing product for air use, noise and force. We'll compare it to our Intelligent Compressed Air® products and provide a full report to help improve your process.

Adjustable Air Nozzles



Model 1009 1/8 NPT male
Material: Aluminum

Model 1009SS 1/8 NPT male
Material: Type 303 Stainless Steel



Adjustable Air Nozzles are perfect for a variety of blowoff applications.

Model 1009 and 1009SS Adjustable Air Nozzles

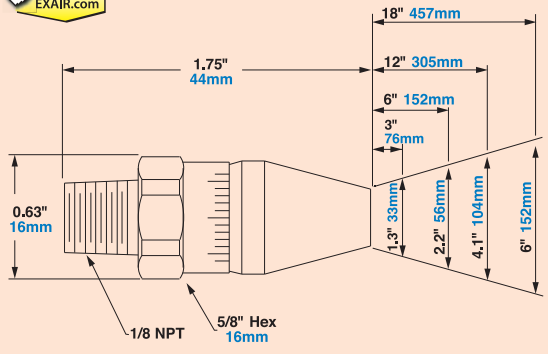
Adjustable Air Nozzles are suitable for a wide variety of blowoff applications. The design allows you to "tune in" the force and flow to the application requirements, thereby minimizing air consumption. A micrometer-like dial indicates the gap setting. A set screw in the end can be tightened so the air nozzle holds the setting.

Air Consumption		Force*		Sound Level
SCFM	SLPM	Ozs	Grams	dBA
13	368	12	340	79

* Force measured at 12" (305mm) from target with a .008" (0.20mm) factory setting.
Sound level measure d at 3' (914mm).
All measurements taken at 80 PSIG (5.5 BAR).

Dimensions and Airflow Pattern

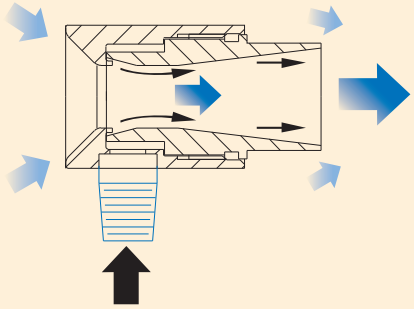
DOWNLOAD drawings at EXAIR.com



An INTELLIGENT COMPRESSED AIR® Product

How Air Jets Work

Air Jets utilize the Coanda effect (wall attachment of a high velocity fluid) to produce air motion in their surroundings. As illustrated on the right, a small amount of compressed air (black arrows) is throttled through an internal ring nozzle above sonic velocity. A vacuum is produced, pulling large volumes of surrounding, or "free" air, through the jet (blue arrows). **Both the outlet and inlet can be ducted for remote positioning. If the end is blocked, flow simply reverses at well below OSHA dead end pressure requirements.**



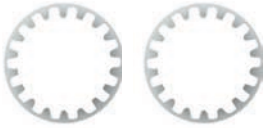
High Velocity Air Jets



Model 6013 1/8 NPT male
Material: Brass
Max Temp: 275°F (135°C)



Model 6013SS 1/8 NPT male
Material: Type 303 Stainless Steel
Max Temp: 400°F (204°C)



Material: Type 303 Stainless Steel

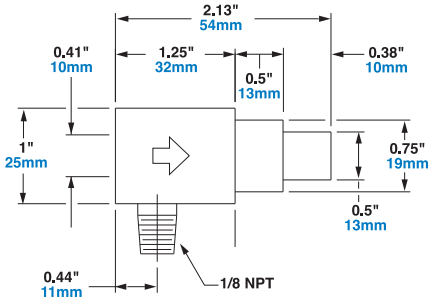
Model 6013 and 6013SS High Velocity Air Jets

Provides maximum thrust with a confined, directed airstream. It is the best choice for part ejection, chip removal, and part drying.

Shim Sets: Shims can be used to change the gap on the Model 6013 and 6013SS High Velocity Air Jet.

Air Consumption		Force*		Sound Level
SCFM	SLPM	Ozs	Grams	dBA
22	622	20	567	82

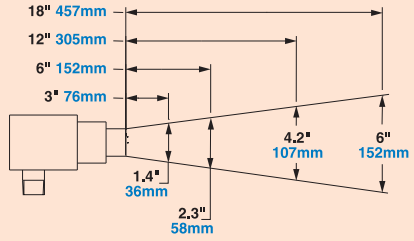
* Force measured at 12" (305mm) from target with a .015" (0.38mm) shim installed.
Sound level measured at 3' (914mm).
All measurements taken at 80 PSIG (5.5 BAR).



The Model 6313 Air Jet Shim Set for the High Velocity Air Jet includes a .006" (0.15mm) and a .009" (0.23mm) thick shim. A .015" (0.38mm) shim comes installed with the Model 6013 and 6013SS Air Jet.

Airflow Pattern

DOWNLOAD drawings at EXAIR.com



Adjustable Air Jets



Model 6019 1/8 NPT male
Material: Brass
Max Temp: 275°F (135°C)



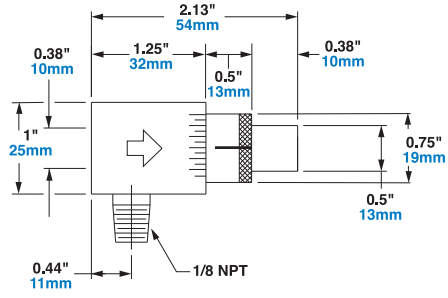
Model 6019SS 1/8 NPT male
Material: Type 303 Stainless Steel
Max Temp: 400°F (204°C)

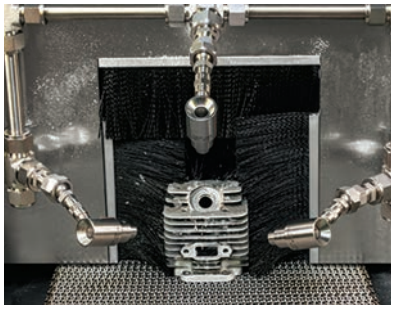
Model 6019 and 6019SS Adjustable Air Jets

This is an adjustable version of the Model 6013 High Velocity Air Jet. Airflow and thrust are easily adjusted using the micrometer gap indicator.

Air Consumption		Force*		Sound Level
SCFM	SLPM	Ozs	Grams	dBA
18	509	16	454	83

* Force measured at 12" (305mm) from target with a .006" (0.15mm) setting.
Sound level measured at 3' (914mm).
All measurements taken at 80 PSIG (5.5 BAR).

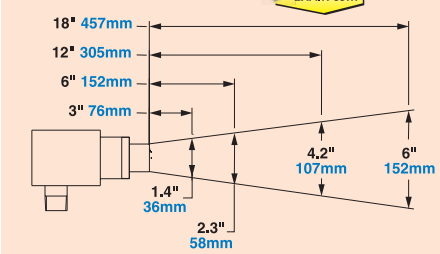




A combination of Model 6013SS High Velocity Air Jets dry this chainsaw cylinder head.

Airflow Pattern

DOWNLOAD drawings at EXAIR.com



How Much Air Does It Really Use?

The amount of compressed air wasted by copper tubes, drilled pipe and other compressed air blowoffs can easily cost thousands of dollars per year. To quantify it, air consumption can be translated into electrical energy use. One horsepower of compressor (746 Watts) generates 4 to 5 SCFM (113 to 142 SLPM). The SCFM (SLPM) output depends on the efficiency of the compressor. Wasteful blowoffs can drain the compressed air system where a plant will experience frequent and sizeable pressure drops. The lack of air can be eliminated when the inefficient blowoffs are replaced.

Efficient products like EXAIR's engineered Super Air Nozzles are quiet while being capable of pulling in 25 parts of room air for every one part of compressed air. Companies who want to "Go Green" and minimize compressed air use should listen for the loud compressed air noise in their plant. Once the noisy blowoff is located, EXAIR's Digital Sound Level Meter (shown on page 17) can isolate the source and measure the sound level. Replacing one drilled pipe or other homemade blowoff with one Super Air Nozzle can amount to a large air savings. Here's a typical example:



EXAIR's Digital Sound Level Meter detects the source of high noise. (See page 17)







Digital Flowmeter with USB Data Logger are available. See pages 10-16 for full details.

A Steel Plant Reduces Air Use by 59%

A steel plant was using open ended pipes on their cold rolled process to blow away a dense fog of oil vapor so the operator could see the process. Each pipe consumed 195 SCFM (5,521 SLPM) of compressed air. With only a 3:1 air amplification ratio, the open ended pipe did a poor job of clearing the fog. The pipes were dangerous since they could potentially be dead ended (an OSHA violation). Even with hearing protection, workers complained that it was loud.

They installed **(2) Model 1106 1/2 NPT Stainless Steel Super Air Nozzles** with **Model 9069 Swivel Fittings** (to aim them) to blow the fog across the 6' (1.8m) width. The Super Air Nozzles completely cleared the fog and the workers complimented the significant noise drop. **Each open pipe that used to consume 195 SCFM (5,521 SLPM) was reduced to only 60 SCFM (1,699 SLPM) when the Super Air Nozzles were installed.**

Before



After



Compressed air products should not be used at pressures higher than indicated by the manufacturer since this wastes air. When looking for places to conserve air, it is important to measure the air consumption of everything connected to the compressed air supply rather than relying on the numbers printed in a manufacturer's literature. Some manufacturers of compressed air products understate the air consumption of their products. It is hard to say if it is done intentionally or in error. One possibility is that their flow meter has not been regularly calibrated. Another reason could be a failure to properly use their flow meter.

Most flow meter manufacturers require that any measurement made on their meter be multiplied by a correction factor in order to get the exact air consumption measurement. This takes into account the conditions under which the flow meter was calibrated. If a company using one of these flow meters takes the reading but fails to multiply it by the appropriate correction factor, it would appear their product uses a lot less compressed air – easily half of what it actually consumes. **EXAIR's Digital Flowmeter models (starting on page 10) are an easy to use solution that does not require regular calibration and provides the actual reading without having to use a correction factor.**

High Force Air Nozzles

An INTELLIGENT COMPRESSED AIR® Product

Some applications require extremely high force with extensive reach. EXAIR offers most standard nozzles in a high force version. With incredibly high blowing forces these nozzles are ideal for part ejection as well as blowoff, cooling and drying applications. EXAIR has engineered Large Super Air Nozzles that put the blowing capability of multiple nozzles into one single air nozzle. Hard-hitting force is measured in pounds, not ounces. All meet OSHA noise level and dead end pressure requirements.

High Force Air Nozzles "Quick Pick" Comparison

High Force Air Nozzles Comparison (sorted by compressed air consumption)

Model	Material	Description	Inlet	Air Consumption at 80 PSIG (5.5 BAR)		Force		Sound Level dBA	More Details
				SCFM	SLPM	Lbs	Grams		
HP1126	Zinc Aluminum alloy	1" High Power Flat Super Air Nozzle	1/8 FNPT	17.5	495	1†	454	82	p. 63
HP1126SS	Stainless Steel - Type 316	1" High Power Flat Super Air Nozzle	1/8 FNPT	17.5	495	1†	454	82	p. 63
HP1002	Brass	High Power Safety Air Nozzle	1/4 FNPT	32	906	1.8*	816	87	p. 64
HP1002SS	Stainless Steel - Type 303	High Power Safety Air Nozzle	1/4 FNPT	32	906	1.8*	816	87	p. 64
1104	ZInc Aluminum alloy	Super Air Nozzle	3/8 FNPT	35	991	1.9*	862	82	p. 64
1104SS	Stainless Steel - Type 316	Super Air Nozzle	3/8 FNPT	35	991	1.9*	862	82	p. 64
1104-PEEK	PEEK (Plastic)	Super Air Nozzle	3/8 FNPT	35	991	1.9*	862	82	p. 64
1105	ZInc Aluminum alloy	Super Air Nozzle	3/8 MNPT	35	991	1.9*	862	82	p. 64
1105SS	Stainless Steel - Type 316	Super Air Nozzle	3/8 MNPT	35	991	1.9*	862	82	p. 64
HP1125	Zinc Aluminum alloy	2" High Power Flat Super Air Nozzle	1/4 FNPT	37	1,039	2.2†	998	83	p. 64
HP1125SS	Stainless Steel - Type 316	2" High Power Flat Super Air Nozzle	1/4 FNPT	37	1,039	2.2†	998	83	p. 64
1111-4	Zinc Aluminum alloy	Super Air Nozzle Cluster	3/8 FNPT	56	1,585	3.2*	1,451	82	p. 67
1008SS	Stainless Steel - Type 316	Back Blow Air Nozzle	1 FNPT	57	1,614	NA	NA	89	p. 59
1106	Zinc Aluminum alloy	Super Air Nozzle	1/2 FNPT	60	1,699	3.3*	1,497	87	p. 65
1106SS	Stainless Steel - Type 316	Super Air Nozzle	1/2 FNPT	60	1,699	3.3*	1,497	87	p. 65
1106-PEEK	PEEK (Plastic)	Super Air Nozzle	1/2 FNPT	60	1,699	3.3*	1,497	87	p. 65
1107	Zinc Aluminum alloy	Super Air Nozzle	1/2 MNPT	60	1,699	3.3*	1,497	87	p. 65
1107SS	Stainless Steel - Type 316	Super Air Nozzle	1/2 MNPT	60	1,699	3.3*	1,497	87	p. 65
1112	Zinc Aluminum alloy	Super Air Nozzle	3/4 FNPT	91	2,577	4.5*	2,041	96	p. 65
1112SS	Stainless Steel - Type 316	Super Air Nozzle	3/4 FNPT	91	2,577	4.5*	2,041	96	p. 65
1113	Zinc Aluminum alloy	Super Air Nozzle	3/4 MNPT	91	2,577	4.5*	2,041	96	p. 65
1113SS	Stainless Steel - Type 316	Super Air Nozzle	3/4 MNPT	91	2,577	4.5*	2,041	96	p. 65
1111-7	Zinc Aluminum alloy	Super Air Nozzle Cluster	1/2 FNPT	98	2,773	5.7*	2,585	85	p. 67
1114	Zinc Aluminum alloy	Super Air Nozzle	1 FNPT	135	3,823	6.6*	2,994	99	p. 65
1114SS	Stainless Steel - Type 316	Super Air Nozzle	1 FNPT	135	3,823	6.6*	2,994	99	p. 65
1115	Zinc Aluminum alloy	Super Air Nozzle	1 MNPT	135	3,823	6.6*	2,994	99	p. 65
1115SS	Stainless Steel - Type 316	Super Air Nozzle	1 MNPT	135	3,823	6.6*	2,994	99	p. 65
1111-12	Zinc Aluminum alloy	Super Air Nozzle Cluster	1 FNPT	168	4,754	9.8*	4,445	89	p. 67
1116	Zinc Aluminum alloy	Super Air Nozzle	1-1/4 FNPT	188	5,324	9.4*	4,264	102	p. 66
1117	Zinc Aluminum alloy	Super Air Nozzle	1-1/4 MNPT	188	5,324	9.4*	4,264	102	p. 66
1118	Zinc Aluminum alloy	Super Air Nozzle	1-1/4 FNPT	300	8,495	15*	6,804	106	p. 66
1119	Zinc Aluminum alloy	Super Air Nozzle	1-1/4 MNPT	300	8,495	15*	6,804	106	p. 66
1120	Zinc Aluminum alloy	Super Air Nozzle	1-1/4 FNPT	460	13,026	23*	10,433	109	p. 66
1121	Zinc Aluminum alloy	Super Air Nozzle	1-1/4 MNPT	460	13,026	23*	10,433	109	p. 66

For Air Nozzles with lower force, see page 54.

* Force measured at 12" (305mm) from target. All sound levels measured at 3 feet (914mm). All measurements taken at 80 PSIG (5.5 BAR).

† Force measured at 12" (305mm) from target with a .025" (0.64mm) shim installed.

FNPT = NPT Female
MNPT = NPT Male

1" High Power Flat Super Air Nozzles™



Model HP1126 1/8 NPT female
Material: Zinc Aluminum alloy
Model HP1126SS 1/8 NPT female
Material: Type 316 Stainless Steel



A 1" High Power Flat Super Air Nozzle is used to tip a part from a chute and on to a conveyor.

Model HP1126 and HP1126SS
1" High Power Flat Super Air Nozzles

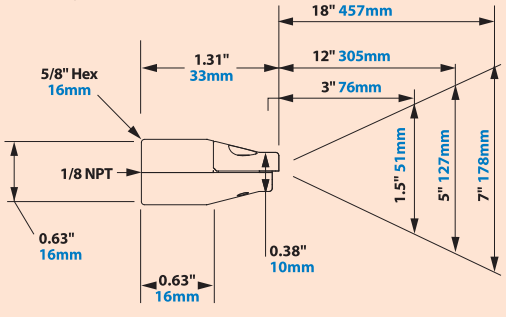
EXAIR's 1" High Power Flat Super Air Nozzles produce a flat 1" (25mm) wide airstream with a blowing force of 1 pound. The unique design of this super-efficient nozzle makes it an ideal fit for both tight spaces and tight budgets. It uses EXAIR's patented technology to maximize entrained airflow while reducing noise levels.

Air Consumption		Force*		Sound Level
SCFM	SLPM	Lbs	Grams	dBA
17.5	495	1	454	82

* Force measured at 12" (305mm) from target.
Sound level measured at 3' (914mm).
All measurements taken at 80 PSIG (5.5 BAR).
.025" (0.64mm) shim installed.

Dimensions and Airflow Pattern

DOWNLOAD drawings at EXAIR.com



The Model HP1136SS Shim Set for the 1" High Power Flat Super Air Nozzle includes a .020" (0.51mm) and .030" (0.76mm) thick shim. A .025" (0.64mm) shim is installed.

High Force Air Nozzles

High Power Safety Air Nozzles™



Model HP1002 1/4 NPT female
Material: Brass
Model HP1002SS 1/4 NPT female
Material: Type 303 Stainless Steel

Model HP1002 and HP1002SS High Power Safety Air Nozzles

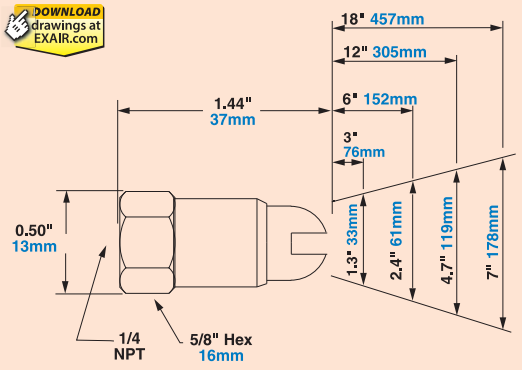
Provide strong blowing force for applications requiring high thrust and velocity. It uses more compressed air than other air nozzles but is low when compared to typical blow-offs delivering the same force.

Air Consumption		Force*		Sound Level
SCFM	SLPM	Lbs	Grams	dBA
32	906	1.8	816	87

* Force measured at 12" (305mm) from target.
Sound level measured at 3' (914mm).
All measurements taken at 80 PSIG (5.5 BAR).

Dimensions and Airflow Pattern

DOWNLOAD drawings at EXAIR.com



2" High Power Flat Super Air Nozzles™



Model HP1125 1/4 NPT female
Material: Zinc Aluminum alloy
Model HP1125SS 1/4 NPT female
Material: Type 316 Stainless Steel



Model HP1125 and HP1125SS 2" High Power Flat Super Air Nozzles

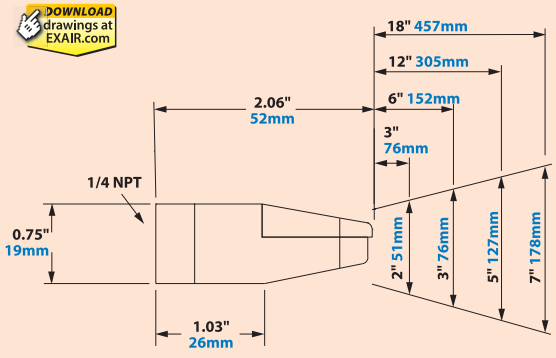
EXAIR's 2" High Power Flat Super Air Nozzles produce a flat 2" (51mm) wide air-stream with a strong blowing force of 2.2 pounds (998 grams). The adjustable force is more than three times that of ordinary air nozzles. It uses EXAIR's patented† technology to maximize entrained airflow while reducing noise levels.

Air Consumption		Force*		Sound Level
SCFM	SLPM	Lbs	Grams	dBA
37	1,039	2.2	998	83

* Force measured at 12" (305mm) from target.
Sound level measured at 3' (914mm).
All measurements taken at 80 PSIG (5.5 BAR).
.025" (0.64mm) shim installed.
† Patent #5402938

Dimensions and Airflow Pattern

DOWNLOAD drawings at EXAIR.com



Note: For highest force and flow, order Model 900633 .030" (0.76mm) shim.



The Model HP1132SS Shim Set for the 2" High Power Flat Super Air Nozzle includes a .020" (0.51mm) and .030" (0.76mm) thick shim. A .025" (0.64mm) shim is installed.

Large Super Air Nozzles™



Model 1104 3/8 NPT female
Material: Zinc Aluminum alloy
Model 1104SS 3/8 NPT female
Material: Type 316 Stainless Steel
Model 1104-PEEK 3/8 NPT female
Material: PEEK (plastic)



Model 1105 3/8 NPT male
Material: Zinc Aluminum alloy
Model 1105SS 3/8 NPT male
Material: Type 316 Stainless Steel

Model 1104, 1104SS, 1104-PEEK, 1105 and 1105SS 3/8 NPT Super Air Nozzles

EXAIR's 3/8 NPT Super Air Nozzles produce 1.9 lbs (862 grams) of strong blowing force that is 2.3 times that of the standard Super Air Nozzle. The protective aerodynamic slots guide the airflow to a single point of convergence for hard-hitting force and dramatic noise reduction over typical blowoffs.

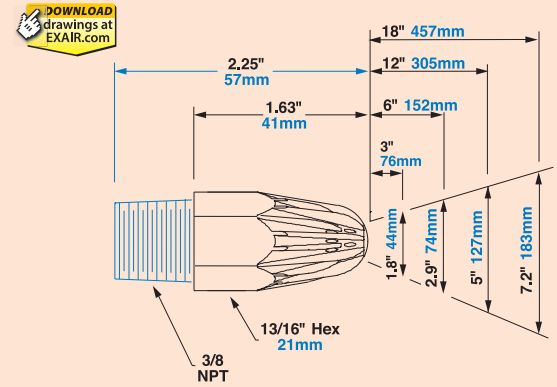
Air Consumption		Force*		Sound Level
SCFM	SLPM	Lbs	Grams	dBA
35	991	1.9	862	82

* Force measured at 12" (305mm) from target.
Sound level measured at 3' (914mm).
All measurements taken at 80 PSIG (5.5 BAR).

Plant Engineering PRODUCT of the YEAR Finalist 2014

Dimensions and Airflow Pattern

DOWNLOAD drawings at EXAIR.com



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

An INTELLIGENT COMPRESSED AIR® Product

Large Super Air Nozzles™



Model 1106 1/2 NPT female
Material: Zinc Aluminum alloy
Model 1106SS 1/2 NPT female
Material: Type 316 Stainless Steel
Model 1106-PEEK 1/2 NPT female
Material: PEEK (Plastic)



Model 1107 1/2 NPT male
Material: Zinc Aluminum alloy
Model 1107SS 1/2 NPT male
Material: Type 316 Stainless Steel

Model 1106, 1106-PEEK, 1106SS, 1107 and 1107SS 1/2 NPT Super Air Nozzles

EXAIR's 1/2 NPT Super Air Nozzles produce 3.3 lbs (1.5 kg) of blowing force – 4 times that of ordinary nozzles. Air consumption and noise are extremely low compared to that of open pipe or copper tubes.

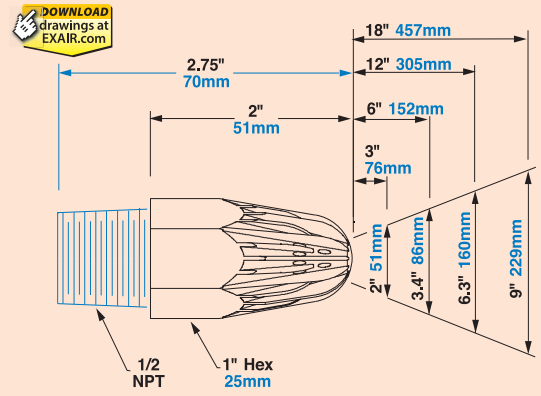
Air Consumption		Force*		Sound Level
SCFM	SLPM	Lbs	Kg	dBA
60	1,699	3.3	1.5	87

* Force measured at 12" (305mm) from target.
Sound level measured at 3' (914mm).
All measurements taken at 80 PSIG (5.5 BAR).

Plant Engineering PRODUCT of the YEAR Finalist 2005

2024 WINNER OHS INDUSTRIAL HYGIENE AWARDS

Dimensions and Airflow Pattern





Model 1112 3/4 NPT female
Material: Zinc Aluminum alloy
Model 1112SS 3/4 NPT female
Material: Type 316 Stainless Steel



Model 1113 3/4 NPT male
Material: Zinc Aluminum alloy
Model 1113SS 3/4 NPT male
Material: Type 316 Stainless Steel

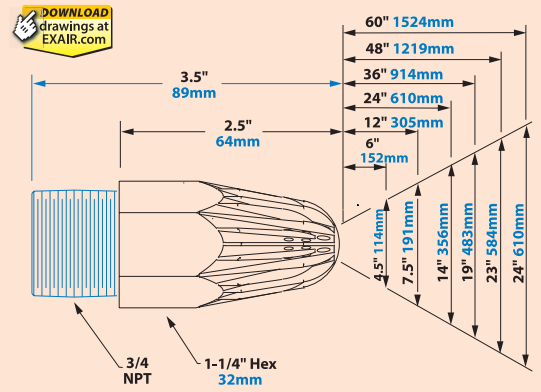
Model 1112, 1112SS, 1113 and 1113SS 3/4 NPT Super Air Nozzles

EXAIR's Super Air Nozzles are available in larger sizes where extreme force is required. The 3/4 NPT Super Air Nozzles produce 4.5 lbs (2.04 kg) of blowing force – over 5 times that of ordinary nozzles.

Air Consumption		Force*		Sound Level
SCFM	SLPM	Lbs	Kg	dBA
91	2,577	4.5	2.04	96

* Force measured at 12" (305mm) from target.
Sound level measured at 3' (914mm).
All measurements taken at 80 PSIG (5.5 BAR).
OSHA allows 3 hours of exposure per day without hearing protection.

Dimensions and Airflow Pattern





Model 1114 1 NPT female
Material: Zinc Aluminum alloy
Model 1114SS 1 NPT female
Material: Type 316 Stainless Steel



Model 1115 1 NPT male
Material: Zinc Aluminum alloy
Model 1115SS 1 NPT male
Material: Type 316 Stainless Steel

Model 1114, 1114SS, 1115 and 1115SS 1 NPT Super Air Nozzles

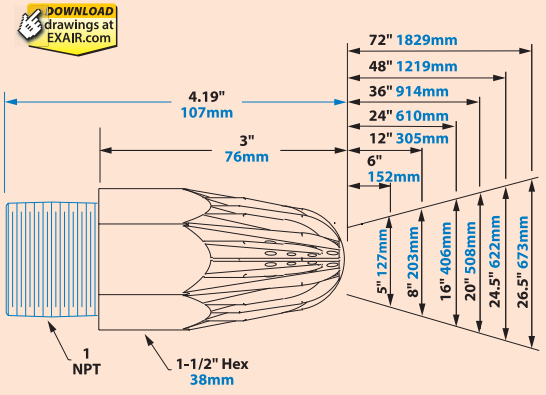
EXAIR's 1 NPT Super Air Nozzles optimize entrained airflow across the nozzle surface to minimize the noise level while providing extremely strong blowing force. They produce 6.6 lbs (3.01 kg) of blowing force – over 8 times that of ordinary nozzles.

Air Consumption		Force*		Sound Level
SCFM	SLPM	Lbs	Kg	dBA
135	3,823	6.6	2.99	99

* Force measured at 12" (305mm) from target.
Sound level measured at 3' (914mm).
All measurements taken at 80 PSIG (5.5 BAR)
OSHA allows 2 hours of exposure per day without hearing protection.

2012 Plant Engineering PRODUCT of the YEAR Bronze Award

Dimensions and Airflow Pattern



Air Nozzles & Jets

High Force Air Nozzles

Large Super Air Nozzles™



Model 1116 1-1/4 NPT female
Material: Zinc Aluminum alloy



Model 1117 1-1/4 NPT male
Material: Zinc Aluminum alloy

Model 1116 and 1117
1-1/4 NPT Super Air Nozzles

EXAIR's 1-1/4 NPT Super Air Nozzles provide exceptionally strong blowing force. They produce 9.4 lbs (4.25 kg) of blowing force – almost 12 times that of the standard Super Air Nozzle.

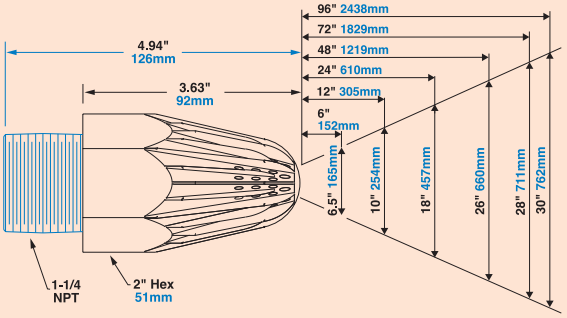
Air Consumption		Force*		Sound Level
SCFM	SLPM	Lbs	Kg	dBA
188	5,324	9.4	4.26	102

* Force measured at 12" (305mm) from target.
Sound level measured at 3' (914mm).
All measurements taken at 80 PSIG (5.5 BAR).
OSHA allows 1 hour of exposure per day without hearing protection.

2008 Plant Engineering PRODUCT of the YEAR WINNER

Dimensions and Airflow Pattern

DOWNLOAD drawings at EXAIR.com





Model 1118 1-1/4 NPT female
Material: Zinc Aluminum alloy



Model 1119 1-1/4 NPT male
Material: Zinc Aluminum alloy

Model 1118 and 1119
1-1/4 NPT Super Air Nozzles

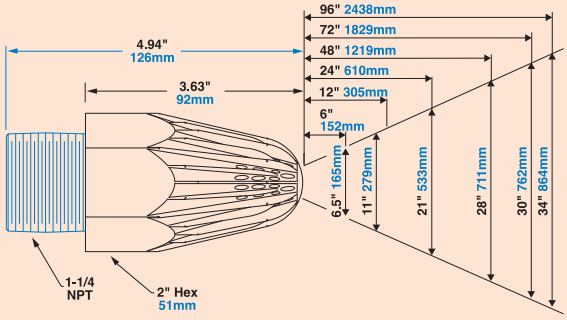
These 1-1/4 NPT Super Air Nozzles have larger orifices than the Model 1116 / 1117 that provide additional air velocity. They generate 15 lbs (6.80 kg) of blowing force – almost 18 times that of the standard Super Air Nozzle.

Air Consumption		Force*		Sound Level
SCFM	SLPM	Lbs	Kg	dBA
300	8,495	15	6.80	106

* Force measured at 12" (305mm) from target.
Sound level measured at 3' (914mm).
All measurements taken at 80 PSIG (5.5 BAR).
OSHA allows 1/2 hour of exposure per day without hearing protection.

Dimensions and Airflow Pattern

DOWNLOAD drawings at EXAIR.com





Model 1120 1-1/4 NPT female
Material: Zinc Aluminum alloy



Model 1121 1-1/4 NPT male
Material: Zinc Aluminum alloy

Model 1120 and 1121
1-1/4 NPT Super Air Nozzles

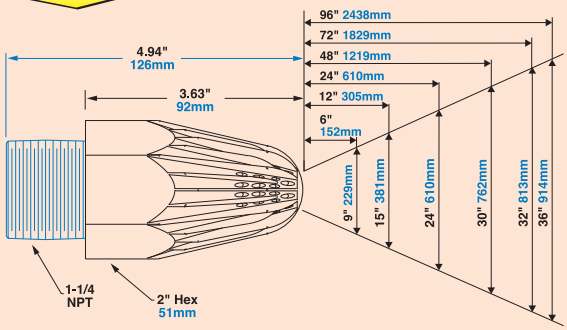
These 1-1/4 NPT Super Air Nozzles have the largest orifices that provide additional air velocity, and generate the strongest blowing force of any single air nozzle. They produce 23 lbs (10.43 kg) of blowing force – almost 28 times that of the standard Super Air Nozzle.

Air Consumption		Force*		Sound Level
SCFM	SLPM	Lbs	Kg	dBA
460	13,026	23	10.43	109

* Force measured at 12" (305mm) from target.
Sound level measured at 3' (914mm).
All measurements taken at 80 PSIG (5.5 BAR).
OSHA allows 1/2 hour of exposure per day without hearing protection.

Dimensions and Airflow Pattern

DOWNLOAD drawings at EXAIR.com



Super Air Nozzle Clusters

Model 1111-4 Super Air Nozzle Cluster

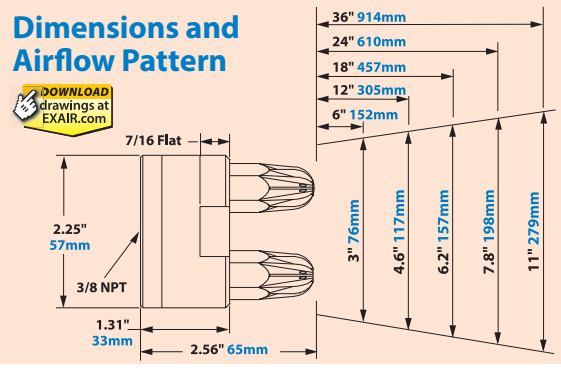


Air Consumption		Force*		Sound Level
SCFM	SLPM	Lbs	Kg	dBA
56	1,585	3.2	1.45	82

* Force measured at 12" (305mm) from target.
Sound level measured at 3' (914mm).
All measurements taken at 80 PSIG (5.5 BAR).

Model 1111-4 3/8 NPT female
Material: Nozzles - Zinc Aluminum alloy
Body - Aluminum

Dimensions and Airflow Pattern



Model 1111-7 Super Air Nozzle Cluster

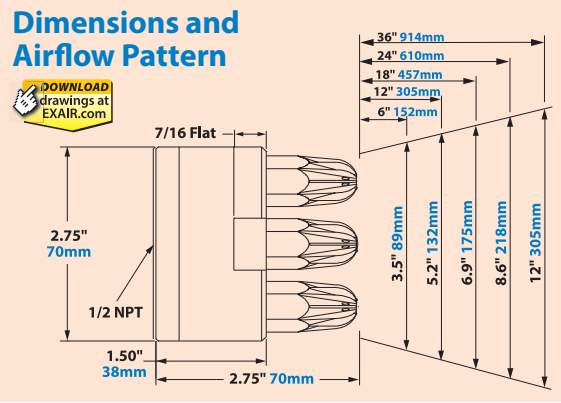


Air Consumption		Force*		Sound Level
SCFM	SLPM	Lbs	Kg	dBA
98	2,773	5.7	2.59	85

* Force measured at 12" (305mm) from target.
Sound level measured at 3' (914mm).
All measurements taken at 80 PSIG (5.5 BAR).

Model 1111-7 1/2 NPT female
Material: Nozzles - Zinc Aluminum alloy
Body - Aluminum

Dimensions and Airflow Pattern



Model 1111-12 Super Air Nozzle Cluster

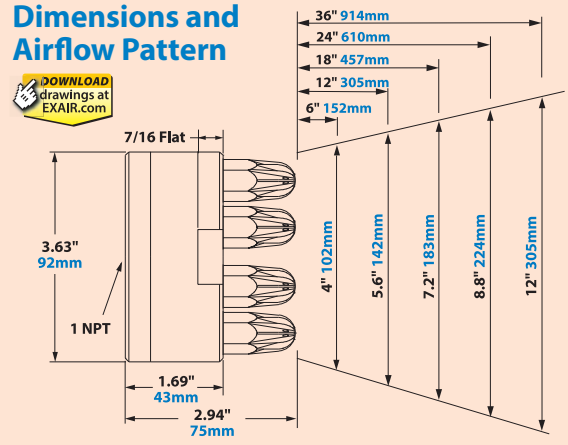


Air Consumption		Force*		Sound Level
SCFM	SLPM	Lbs	Kg	dBA
168	4,754	9.8	4.45	89

* Force measured at 12" (305mm) from target.
Sound level measured at 3' (914mm).
All measurements taken at 80 PSIG (5.5 BAR).

Model 1111-12 1 NPT female
Material: Nozzles - Zinc Aluminum alloy
Body - Aluminum

Dimensions and Airflow Pattern



Flexible Stay Set Hoses™

Adding Flexibility

For applications where frequent repositioning of the standard force Air Nozzles or Jets is required, the Flexible Stay Set Hoses™ are ideal. Simply mount the hose in close proximity to the application and bend it to aim the airstream at the target. Since the hose has "memory", it will not creep or bend. It always keeps the aim until physically moved to the next position.

Two versions of the Stay Set Hoses are available in a variety of lengths. The 1/4 MNPT × 1/4 MNPT hose has a 1/4 NPT male fitting on each end and the 1/4 MNPT × 1/8 FNPT hose has a 1/4 NPT male fitting on one end and 1/8 NPT female fitting on the other.



Flexible Stay Set Hoses bend and keep their aim until physically moved.

Nozzle Accessories

Flexible Stay Set Hoses™ continued

The Air Nozzles shown below can be used with the following Stay Set Hoses (1/4 NPT male fitting on each end):

Model #	Description	Model #	Description
9206	6" (152mm) 1/4 MNPT x 1/4 MNPT	9224	24" (610mm) 1/4 MNPT x 1/4 MNPT
9212	12" (305mm) 1/4 MNPT x 1/4 MNPT	9230	30" (762mm) 1/4 MNPT x 1/4 MNPT
9218	18" (457mm) 1/4 MNPT x 1/4 MNPT	9236	36" (914mm) 1/4 MNPT x 1/4 MNPT



Model 1002
Safety Air Nozzle

Model 1002SS
SS Safety Air Nozzle

Model HP1002
High Power Safety Air Nozzle

Model HP1002SS
SS High Power Safety Air Nozzle



Model 1122
2" (51mm) Flat Super Air Nozzle

Model 1122SS
2" (51mm) SS Flat Super Air Nozzle

Model HP1125
2" (51mm) High Power Flat Super Air Nozzle

Model HP1125SS
2" (51mm) SS High Power Flat Super Air Nozzle



Model 1100
Super Air Nozzle

Model 1100SS
SS Super Air Nozzle

Model 1100-PEEK
PEEK Super Air Nozzle

Model 1006SS
SS Back Blow Air Nozzle

The Air Nozzles and Jets shown below can be used with the following Stay Set Hoses (1/4 NPT male fitting on one end, 1/8 NPT female on the other):

Model #	Description	Model #	Description
9256	6" (152mm) 1/4 MNPT x 1/8 FNPT	9274	24" (610mm) 1/4 MNPT x 1/8 FNPT
9262	12" (305mm) 1/4 MNPT x 1/8 FNPT	9280	30" (762mm) 1/4 MNPT x 1/8 FNPT
9268	18" (457mm) 1/4 MNPT x 1/8 FNPT	9286	36" (914mm) 1/4 MNPT x 1/8 FNPT



Model 1108SS-NPT
Atto Super Air Nozzle

Model 1108-PEEK-NPT
Atto PEEK Super Air Nozzle

Model 1109SS-NPT
Pico Super Air Nozzle

Model 1109-PEEK-NPT
Pico PEEK Super Air Nozzle

Model 1110SS-NPT
Nano Super Air Nozzle

Model 1110-PEEK-NPT
Nano PEEK Super Air Nozzle



Model 1010SS
SS Micro Air Nozzle



Model 1126 1" (25mm)
Flat Super Air Nozzle

Model 1126SS 1" (25mm)
SS Flat Super Air Nozzle

Model HP1126 1" (25mm)
High Power Flat Super Air Nozzle

Model HP1126SS 1" (25mm)
SS High Power Flat Super Air Nozzle



Model 1103
Mini Super Air Nozzle

Model 1103SS
SS Mini Super Air Nozzle



Model 1009
Adjustable Air Nozzle

Model 1009SS
SS Adjustable Air Nozzle



Model 6013
High Velocity Air Jet

Model 6013SS
SS High Velocity Air Jet



Model 6019
Adjustable Air Jet

Model 6019SS
SS Adjustable Air Jet



Flexible Stay Set Hoses bend to fit your application and will maintain their orientation until the position needs to be re-adjusted. The airstream can be aimed at precisely the correct spot.

Swivel Fittings

Swivel Fittings can be added to most EXAIR Nozzles by adding a "W" to the Model#.



Example:
1122 (2" Flat Super Air Nozzle)
+ W (Swivel Fitting)
1122W

EXAIR's Swivel Fittings make it easy to adjust the aim of the Air Nozzles and Jets. Correct placement of the blowing angle can help optimize performance, reduce noise levels and improve efficiency. Swivel Fittings permit a movement of 25 degrees from the center axis for a total movement of 50 degrees. Type 303 or 316 Stainless Steel.

Swivel Fittings

Model #	Description
9201	M4 x 0.5mm female x 1/8 MNPT, 316SS
9202	M5 x 0.5mm female x 1/8 MNPT, 316SS
9203	M6 x 0.75mm female x 1/8 MNPT, 316SS
9052	1/8 MNPT x 1/8 FNPT, 303SS
9053	1/4 MNPT x 1/4 FNPT, 303SS
9068	3/8 MNPT x 3/8 FNPT, 303SS
9069	1/2 MNPT x 1/2 FNPT, 303SS
9023	3/4 MNPT x 3/4 FNPT, 303SS
9204	1 MNPT x 1 FNPT, 303SS

Magnetic Bases

Magnetic bases are suited to applications where frequent movement of the Air Nozzle or Jet is required. The powerful magnet permits horizontal or vertical mounting that will hold the blowing position of the Stay Set Hose. A shutoff valve is provided that can be used to vary the force and flow.



Model #	Description
9042	One Outlet Magnetic Base
9043	Two Outlet Magnetic Base

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

An INTELLIGENT COMPRESSED AIR® Product

Build Your Own System

Now you can put together the best combination that suits your blowoff, cooling, drying or cleaning application. Select the model number that includes your choice of Air Nozzle or Jet, a length of Stay Set Hose, and a one or two outlet magnetic base. Here's how:

1. Choose the Air Nozzle or Jet model. **Example:** Model 1122 Super Air Nozzle
2. You have the option to include a length of Stay Set Hose. Simply list the model of the Stay Set Hose (shown on previous page) as a dash number after the Air Nozzle or Jet model number.
   Example: A Model 1122 Super Air Nozzle with a Model 9212 12" (305mm) Stay Set Hose is a Model 1122-**9212.**
3. You have the option to include a magnetic base. If you want a One Outlet Magnetic Base, change the second digit of the "added on" dash number to a **"3"**. If you would like the Two Outlet Magnetic Base, change the second digit to a **"4"**. By using a **"4"**, you will receive (2) Air Nozzles or Jets and (2) Stay Set Hoses to attach to the Two Outlet Magnetic Base.
   Example: Two Model 1122 Super Air Nozzles with two 12" (305mm) Stay Set Hoses and Two Outlet Magnetic Base is a Model 1122-9**4**12.



A Model 1122-9412 includes two Model 1122 Super Air Nozzles with two 12" (305mm) Stay Set Hose and Two Outlet Magnetic Base.

Blowoff Kits



Model # 1100-9312

Blowoff Kit includes:

(1) 1100 Super Air Nozzle
(1) 9212 12" (305mm) Stay Set Hose
(1) 9042 Magnetic Base



Model # 1100-9412

Blowoff Kit includes:

(2) 1100 Super Air Nozzles
(2) 9212 12" (305mm) Stay Set Hose
(1) 9043 Magnetic Base



Model # 1103-9362

Blowoff Kit includes:

(1) 1103 Mini Super Air Nozzle
(1) 9262 12" (305mm) Stay Set Hose
(1) 9042 Magnetic Base



Model # 1103-9462

Blowoff Kit includes

(2) 1103 Mini Super Air Nozzles
(2) 9262 12" (305mm) Stay Set Hose
(1) 9043 Magnetic Base



Model # 1122-9312

Blowoff Kit includes

(1) 1122 2" Flat Super Air Nozzle
(1) 9212 12" (305mm) Stay Set Hose
(1) 9042 Magnetic Base



Model # 1122-9412

Blowoff Kit includes

(2) 1122 2" Flat Super Air Nozzles
(2) 9212 12" (305mm) Stay Set Hose
(1) 9043 Magnetic Base



Model # 1909

Blowoff Kit includes

(1) 1102 Mini Super Air Nozzle
(1) 1009 Adjustable Air Nozzle
(1) 1100 1/4 NPT Super Air Nozzle
(1) 1104 3/8 NPT Super Air Nozzle
(1) 1106 1/2 NPT Super Air Nozzle
(1) 1122 2" Flat Super Air Nozzle
(1) 6013 High Velocity Air Jet
(1) 6019 Adjustable Air Jet



Model # 1909SS

Stainless Steel Blowoff Kit includes

(1) 1102SS 1/8 NPT Mini Super Air Nozzle
(1) 1009SS Adjustable Air Nozzle
(1) 1100SS 1/4 NPT Super Air Nozzle
(1) 1104SS 3/8 NPT Super Air Nozzle
(1) 1106SS 1/2 NPT Super Air Nozzle
(1) 1010SS 1/8 NPT Micro Air Nozzle
(1) 1122SS 2" Flat Super Air Nozzle



EXAIR nozzles wih flexible stayset hoses blow dry air onto a manufacturing part.