### **Air Nozzles and Jets**









### **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 the award winning Super Air Nozzles!



### 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.

### **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



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 blow off application on a sensitive lens.

### **Applications** Part cleaning

- Chip removal
- Part drying
- · Liquid blowoff
- · Part cooling
- · Material conveying
- · Part ejection
- Fiber conveying











### **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)								
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				Ai	r Consi		n of Ho voffs	mema	de
				Co	pper Tu	be	C	pen Pip	e
	PSIG	BAR		1/4"	5/16"	3/8"	1/8"	1/4"	3/8"
	80	5.5 SCFM		33	58	87	70	140	240
	80	5.5	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 is easy to calculate and proves 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:

- 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).
- 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 52, is 10 SCFM (283 SLPM).
- 3. Compressed air saved = 70 10 = 60 SCFM (1,981 283 = 1,698 SLPM)
- For this example, the blowoff is continuous. If the duty cycle was 20%, then air saved would be 60 x .2 = 12 SCFM (1,698 x .2 = 340 SLPM).
- 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.)
- Dollars saved per hour = SCFM saved x 60 minutes x cost/1,000 SCF (SLPM saved x 60 min x cost/10,000 SL) = 60 x 60 x \$0.25/1,000 (= 1,698 x 60 x \$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 use the Coanda effect to amplify compressed airflow up to 25 times or more. As illustrated on the right, 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))									
		Air Consu	umption	Fo	rce	Sound	More		
Model	Material	Description	Inlet	SCFM	SLPM	Ozs	Grams	Level dBA	Details
1108SS	Stainless Steel - Type 316	Atto Super Air Nozzle	M4 x 0.5	2.5	71	2.0*	56.7	58	p. 53
1108-PEEK	PEEK (Plastic)	Atto Super Air Nozzle	M4 x 0.5	2.5	71	2.0*	56.7	58	p. 53
1108SS-NPT	Stainless Steel - Type 316	Atto Super Air Nozzle	1/8 MNPT	2.5	71	2.0*	56.7	58	p. 53
108-PEEK-NPT	PEEK (Plastic)	Atto Super Air Nozzle	1/8 MNPT	2.5	71	2.0*	56.7	58	p. 53
1109SS	Stainless Steel - Type 316	Pico Super Air Nozzle	M5 x 0.5	4.9	139	5.0*	141.7	68	p. 53
1109-PEEK	PEEK (Plastic)	Pico Super Air Nozzle	M5 x 0.5	4.9	139	5.0*	141.7	68	p. 53
1109SS-NPT	Stainless Steel - Type 316	Pico Super Air Nozzle	1/8 MNPT	4.9	139	5.0*	141.7	68	p. 53
109-PEEK-NPT	PEEK (Plastic)	Pico Super Air Nozzle	1/8 MNPT	4.9	139	5.0*	141.7	68	p. 53
1110SS	Stainless Steel - Type 316	Nano Super Air Nozzle	M6 x 0.75	8.3	235	8.1*	230	75	p. 53
1110-PEEK	PEEK (Plastic)	Nano Super Air Nozzle	M6 x 0.75	8.3	235	8.1*	230	75	p. 53
1110SS-NPT	Stainless Steel - Type 316	Nano Super Air Nozzle	1/8 MNPT	8.3	235	8.1*	230	75	p. 53
110-PEEK-NPT	PEEK (Plastic)	Nano Super Air Nozzle	1/8 MNPT	8.3	235	8.1*	230	75	p. 53
1001	Brass	Safety Air Nozzle	1/8 FNPT	10	283	9*	255	78	p. 58
1102	Zinc Aluminum alloy	Mini Super Air Nozzle	1/8 FNPT	10	283	9*	255	71	p. 54
1102-PEEK	PEEK (Plastic)	Mini Super Air Nozzle	1/8 FNPT	10	283	9*	255	71	p. 54
1102SS	Stainless Steel - Type 316	Mini Super Air Nozzle	1/8 FNPT	10	283	9*	255	71	p. 54
1103	Zinc Aluminum alloy	Mini Super Air Nozzle	1/8 MNPT	10	283	9*	255	71	p. 54
1103SS	Stainless Steel - Type 316	Mini Super Air Nozzle	1/8 MNPT	10	283	9*	255	71	p. 54
1126	Zinc Aluminum alloy	1" Flat Super Air Nozzle	1/8 FNPT	10.5	297	9.8 <sup>†</sup>	278	75	p. 55
1126SS	Stainless Steel - Type 316	1" Flat Super Air Nozzle	1/8 FNPT	10.5	297	9.8⁺	278	75	p. 55
1010SS	Stainless Steel - Type 303	Micro Air Nozzle	1/8 MNPT	13	368	12*	340	80	p. 53
1009	Aluminum	Adjustable Air Nozzle	1/8 MNPT	13	368	12**	340	79	p. 58
1009SS	Stainless Steel - Type 303	Adjustable Air Nozzle	1/8 MNPT	13	368	12**	340	79	p. 58
1100	Zinc Aluminum alloy	Super Air Nozzle	1/4 FNPT	14	396	13*	368	74	p. 54
1100-PEEK	PEEK (Plastic)	Super Air Nozzle	1/4 FNPT	14	396	13*	368	74	p. 54
1100SS	Stainless Steel - Type 316	Super Air Nozzle	1/4 FNPT	14	396	13*	368	74	p. 54
1101	Zinc Aluminum alloy	Super Air Nozzle	1/4 MNPT	14	396	13*	368	74	p. 54
1101SS	Stainless Steel - Type 316	Super Air Nozzle	1/4 MNPT	14	396	13*	368	74	p. 54
1002	Brass	Safety Air Nozzle	1/4 FNPT	17	481	16*	454	80	p. 58
1002SS	Stainless Steel - Type 303	Safety Air Nozzle	1/4 FNPT	17	481	16*	454	80	p. 58
1003	Brass	Safety Air Nozzle	3/8 FNPT	18	509	18*	510	83	p. 58
6019	Brass	Adjustable Air Jet	1/8 MNPT	18	509	16***	454	83	p. 59
6019SS	Stainless Steel - Type 303	Adjustable Air Jet	1/8 MNPT	18	509	16***	454	83	p. 59
6013	Brass	High Velocity Air Jet	1/8 MNPT	22	622	20 <sup>†</sup>	567	82	p. 59
6013SS	Stainless Steel - Type 303	High Velocity Air Jet	1/8 MNPT	22	622	20 <sup>†</sup>	567	82	p. 59
1122	Zinc Aluminum alloy	2" Flat Super Air Nozzle	1/4 FNPT	22	622	22 <sup>†</sup>	624	77	p. 55
1122SS	Stainless Steel - Type 316	2" Flat Super Air Nozzle	1/4 FNPT	22	622	22 <sup>†</sup>	624	77	p. 55
I 1144	Zinc Aluminum/Steel	2" Super Air Scraper	1/4 FNPT	22	622	22 <sup>†</sup>	624	77	p. 55
1004SS	Stainless Steel - Type 316	Back Blow Air Nozzle	M4 x 0.5	4.5	127	NA	NA	75	p. 57
1006SS	Stainless Steel - Type 316	Back Blow Air Nozzle	1/4 FNPT	22	622	NA	NA	80	p. 57

### For High Force Air Nozzles, see page 61.

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







FNPT = NPT Female



### 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: PFFK (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 forceful, 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		For	Sound Level	
SCFM	SLPM	Ozs	Grams	dBA
2.5	71	2.0	56.7	58

\*Force measured at 12" (305mm) from target. Sound level measured at 3' (914mm)



### **Dimensions and Airflow Patterns**

The Air Nozzles and Jets shown on pages

of force, making them suitable for most

blowoff, drying and cooling applications.

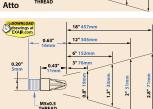
All models shown use a small amount of

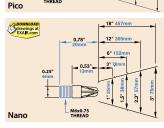
compressed air to entrain large volumes of

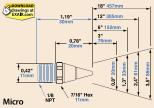
surrounding room air. The award winning Super Air Nozzles have been engineered to provide the best performance with low sound levels and high efficiency.

53 - 59 deliver up to 22 ounces (624 grams)









### Pico Super Air Nozzles<sup>1</sup>



(actual size)

Model 1109SS M5 x 0.5 Material: Type 316 Stainless Steel Model 1109-PFFK 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		For	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 RAR)



### Nano Super Air Nozzles™



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-PFFK-NPT 1/8 NPT male Material: PEFK (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		For	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™



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

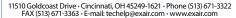
### Model 1010SS Micro Air Nozzle

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		For	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)





### **Air Nozzles**

### Mini Super Air Nozzles™



Model 1102 1/8 NPT female Material: Zinc Aluminum allov Model 1102-PEEK 1/8 NPT female Material: PEEK (plastic) Model 1102SS 1/8 NPT female 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		For	ce*	Sound Level
SCFM	SLPM	Ozs	Grams	dBA
10	283	9	255	71

<sup>\*</sup>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** 18" 457mm 12" 305mm 1.66' 6" 152mr 1.19"

**Dimensions and** 

**Airflow Pattern** 

### Model 1103SS 1/8 NPT male Material: Type 316 Stainless Steel

Model 1103 1/8 NPT male Material: Zinc Aluminum allov



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



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

### 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 can not be blocked or dead ended.

Air Consumption		For	Sound Level	
SCFM	SLPM	Ozs	Grams	dBA
14	396	13	368	74

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







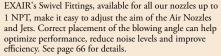


Most EXAIR Air Nozzles have a standard hex base making them easy to install with a socket wrench.

2.38"

1.75"

### **Build Your Own System**



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

18" 457mm

12" 305mm

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

1122W









### Flat Super Air Nozzles COMPRESSED AIR



### 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			For	ce *	Sound Leve
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.









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.

113255

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 Cons	umption	For	Sound Level	
Model	SCFM	SLPM	Ozs	Grams	dBA
1122/112255	21.8	622	22	624	77



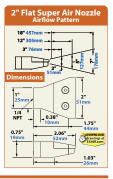


\*Force measured at 12" (305mm) from target. Sound level measured at 3' (914mm). All measurements taken at 80 PSIG (5.5

.015" (0.38mm) shim installed.

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

# 1" Flat Super Air Nozzle Airflow Pattern 18" 457mm 12" 305mm 3" 76mm 1.5"



### Super Air Scraper™



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

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

112255	Stainless Steel 2" Flat Super Air Nozzle Shim Set
113233	Super Air Nozzle Shim Set

### Model 1144 2" Super Air Scraper

EXAIR's 2" Super Air Scraper is a patent pending 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 upon a

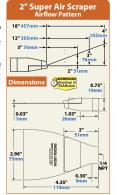
Soft Grip Super Air Scraper (see page 103).

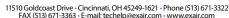
	Air Cons	umption	Fo	rce *	Sound Level					
Model	SCFM	SLPM	Ozs	Grams	dBA					
<b>1144</b> 21.8 622		622	22	624	77					
	F									

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.





### the Competition!

Save Over \$1,200 Per Year 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 55 for more details.

### EXAIR's 2" Flat Super Air Nozzle Theirs (Old Technology)

- 2004 Product Of The Year Winner · Your choice of zinc/aluminum or Type 316 stainless steel
- •Flexible Stay Set Hoses™, swivel fittings and magnetic bases are available
- Meets or exceeds OSHA standards
- · Quietest flat nozzle available

- · Can consume over 30 SCFM
- · Expensive metal or plastic
- No easy adjustment –
- wasted compressed air
- · May not be OSHA safe Significantly louder
- Easy to change the force and flow · Plastic is easily broken

### Here's hown

- 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 x 60 minutes x cost/1,000 SCF = dollars saved per hour.
- In this case, 9.2 SCFM x 60 x .25/1.000 SCF= 13.8 cents saved per hour.
- 13.8 cents per hour x 24 hours = \$3.31 saved per day.
- \$3.31 per day x 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 19 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!





PRODUCT

### **Back Blow Air Nozzles**



### M4 Back Blow Air Nozzle



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

### Model 1004SS 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.

			Consumption Level*			Use With:
	SCFM SLPM		dBA	Inside Diameters		
1004SS 4.5 127		75	1/4" - 1" (6.3-25.4mm)			
* Sound lev	el measur	ed at 3' (914	lmm)			

### **Dimensions and Airflow Pattern** Direction of Airflow 0.19 0.42" FLATS 0.2" 6" 152mm 12" 305mm 18" 457mm

### 1/4 NPT Back Blow Air Nozzle

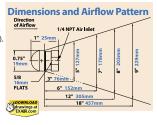


Model 1006SS 1/4 NPT female Material: Type 316 Stainless Steel

### Model 1006SS 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.

	Consu	ir mption	Sound Level*	Use With:
Model	SCFM	SLPM	dBA	Inside Diameters
1006SS	22	622	80	7/8"- 4" (22-102mm)
* Sound lev	el measure	ed at 3' (914	lmm)	2015



### 1 NPT Back Blow Air Nozzle



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

### Model 1008SS 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.

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

<sup>\*</sup> Sound level measured at 3' (914mm)

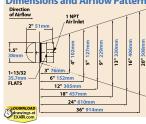


A Back Blow Air Nozzle cleans chips and coolant from inside a machined pipe.



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.

### **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





### **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

### Send in your

for the Award Winning



### 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.

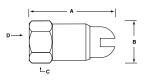
Contact an Application Engineer at 1-800-903-9247.

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

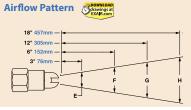
Safety Air Nozzles eject a small amount of compressed air 360° around the outer ring that combines with the air ejected from the center hole to produce a high volume, high velocity blast of air. The slotted end allows air to vent safely should the nozzle end be blocked.

Air C	onsump	otion	For	ce*	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

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



Dimens	ions		В			
Model				Hex	Inlet	
1001	in	1.19	0.38	1/2	1/8	
1001	mm	30	10	13	NPT	
1002	in	1.44	0.50	5/8	1/4	
1002SS	mm	37	13	16	NPT	
1003	in	1.65	0.63	3/4	3/8	
1003	mm	42	16	19	NPT	



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

### 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.

Sound Level		
dBA		
79		

<sup>\*</sup> Force measured at 12" (305mm) from target with a .008" (0.20mm) factory setting

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

## Dimensions and Airflow Pattern | Commode | Co















### High Force Air Nozzles COMPRESSEDAIR



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 Fo	rce Air Nozzles Comparison (sorted	d by compres	sed air cor	nsumptio	n)			
Model	Material	Description	Inlet 80		Air Consumption at 80 PSIG (5.5 BAR)		orce	Sound Level	More Details
				SCFM	SLPM	Lbs	Grams	dBA	Details
HP1126	Zinc Aluminum alloy	1" High Power Flat Super Air Nozzle	1/8 FNPT	17.5	495	1 <sup>†</sup>	454	82	p. 61
HP1126SS	Stainless Steel - Type 316	1" High Power Flat Super Air Nozzle	1/8 FNPT	17.5	495	1 <sup>†</sup>	454	82	p. 61
HP1002	Brass	High Power Safety Air Nozzle	1/4 FNPT	32	906	1.8*	816	87	p. 62
HP1002SS	Stainless Steel - Type 303	High Power Safety Air Nozzle	1/4 FNPT	32	906	1.8*	816	87	p. 62
1104	ZInc Aluminum alloy	Super Air Nozzle	3/8 FNPT	35	991	1.9*	862	82	p. 62
1104SS	Stainless Steel - Type 316	Super Air Nozzle	3/8 FNPT	35	991	1.9*	862	82	p. 62
1104-PEEK	PEEK (Plastic)	Super Air Nozzle	3/8 FNPT	35	991	1.9*	862	82	p. 62
1105	ZInc Aluminum alloy	Super Air Nozzle	3/8 MNPT	35	991	1.9*	862	82	p. 62
1105SS	Stainless Steel - Type 316	Super Air Nozzle	3/8 MNPT	35	991	1.9*	862	82	p. 62
HP1125	Zinc Aluminum alloy	2" High Power Flat Super Air Nozzle	1/4 FNPT	37	1,039	2.2	998	83	p. 62
HP1125SS	Stainless Steel - Type 316	2" High Power Flat Super Air Nozzle	1/4 FNPT	37	1,039	2.2	998	83	p. 62
1111-4	Zinc Aluminum alloy	Super Air Nozzle Cluster	3/8 FNPT	56	1,585	3.2*	1,451	82	p. 65
1008SS	Stainless Steel - Type 316	Back Blow Air Nozzle	1 FNPT	57	1,614	NA	NA	89	p. 57
1106	Zinc Aluminum alloy	Super Air Nozzle	1/2 FNPT	60	1,699	3.3*	1,497	87	p. 63
1106SS	Stainless Steel - Type 316	Super Air Nozzle	1/2 FNPT	60	1,699	3.3*	1,497	87	p. 63
1107	Zinc Aluminum alloy	Super Air Nozzle	1/2 MNPT	60	1,699	3.3*	1,497	87	p. 63
1107SS	Stainless Steel - Type 316	Super Air Nozzle	1/2 MNPT	60	1,699	3.3*	1,497	87	p. 63
1112	Zinc Aluminum alloy	Super Air Nozzle	3/4 FNPT	91	2,577	4.5*	2,041	96	p. 63
1112SS	Stainless Steel - Type 316	Super Air Nozzle	3/4 FNPT	91	2,577	4.5*	2,041	96	p. 63
1113	Zinc Aluminum alloy	Super Air Nozzle	3/4 MNPT	91	2,577	4.5*	2,041	96	p. 63
1113SS	Stainless Steel - Type 316	Super Air Nozzle	3/4 MNPT	91	2,577	4.5*	2,041	96	p. 63
1111-7	Zinc Aluminum alloy	Super Air Nozzle Cluster	1/2 FNPT	98	2,773	5.7*	2,585	85	p. 65
1114	Zinc Aluminum alloy	Super Air Nozzle	1 FNPT	135	3,823	6.6*	3,005	99	p. 63
1114SS	Stainless Steel - Type 316	Super Air Nozzle	1 FNPT	135	3,823	6.6*	3,005	99	p. 63
1115	Zinc Aluminum alloy	Super Air Nozzle	1 MNPT	135	3,823	6.6*	3,005	99	p. 63
1115SS	Stainless Steel - Type 316	Super Air Nozzle	1 MNPT	135	3,823	6.6*	3,005	99	p. 63
1111-12	Zinc Aluminum alloy	Super Air Nozzle Cluster	1 FNPT	168	4,754	9.8*	4,445	89	p. 65
1116	Zinc Aluminum alloy	Super Air Nozzle	1-1/4 FNPT	188	5,324	9.4*	4,252	102	p. 64
1117	Zinc Aluminum alloy	Super Air Nozzle	1-1/4 MNPT	188	5,324	9.4*	4,252	102	p. 64
1118	Zinc Aluminum alloy	Super Air Nozzle	1-1/4 FNPT	300	8,495	15*	6,804	106	p. 64
1119	Zinc Aluminum alloy	Super Air Nozzle	1-1/4 MNPT	300	8,495	15*	6,804	106	p. 64
1120	Zinc Aluminum alloy	Super Air Nozzle	1-1/4 FNPT	460	13,026	23*	10,433	109	p. 64
1121	Zinc Aluminum alloy	Super Air Nozzle	1-1/4 MNPT	460	13,026	23*	10,433	109	p. 64

For Air Nozzles with lower force, see page 52.

### 1" High Power Flat Super Air Nozzles™



Model HP1126 1/8 NPT female Material: Zinc Aluminum alloy Model HP1126SS 1/8 NPT femal

Model HP1126SS 1/8 NPT female Material: Type 316 Stainless Steel



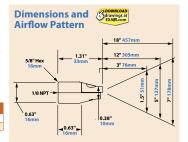
A 1" High Power Flat Super Air Nozzle is used to tip a part from a chute and on to a conveyor.

### 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				Sound Level	
SCFM	SLPM	Lbs	Grams	dBA	
17.5	495	1	454	82	
1.121/205 1/					

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



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.







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

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

FNPT = NPT Female MNPT = NPT Male

### **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 blowoffs delivering the same force.

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

<sup>\*</sup> 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 144\* 156\* Hex NPT 16mm

### 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

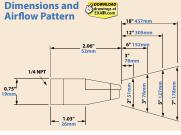
### Model HP1125 and HP1125SS 2" High Power Flat Super Air Nozzles

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 Cons	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



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 allov

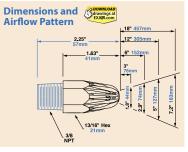
### Model 1104, 1104SS, 1104-PEEK, 1105 and 1105SS 3/8 NPT Super Air Nozzles

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

<sup>\*</sup> Force measured at 12" (305mm) from target Sound level measured at 3' (914mm)





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





### High Force Air Nozzles COMPRESSEDAIR



### 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



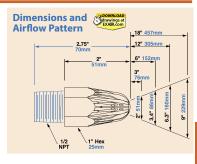
Model 1107 1/2 NPT male Material: Zinc Aluminum alloy

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

### Model 1106, 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 Cons	umption	For	ce*	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)				PRODUCT VEAR





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

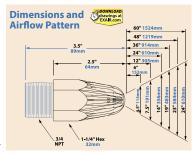
Model 1113SS 3/4 NPT male Material: Type 316 Stainless Steel

### 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 Fo		For	ce*	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.





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

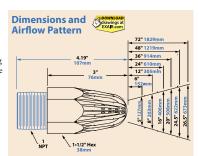
### Model 1114, 1114SS, 1115 and 1115SS 1 NPT Super Air Nozzles

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	3.01	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.









### **High Force Air Nozzles**

### Large Super Air Nozzles



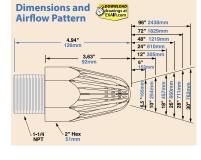
Model 1116 1-1/4 NPT female Material: Zinc Aluminum alloy

### 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	4.25	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.



96" 2438mm

72" 1829mm 48" 1219mm

24" 610mm

12" 305

6"

Dimensions and

4.94"

3.63"

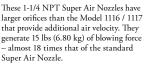
2" Hex

**Airflow Pattern** 



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

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



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.



Material: Zinc Aluminum alloy



Model 1119 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.

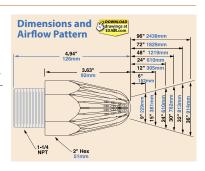


Model 1120 1-1/4 NPT female Material: Zinc Aluminum allov

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

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

<sup>\*</sup> 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.

















### Super Air Nozzle Clusters Compressed Air



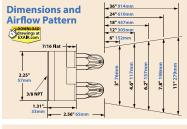
### Super Air Nozzle Clusters Model 1111-4 Super Air Nozzle Cluster



Air Cons	Air Consumption		Force*	
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



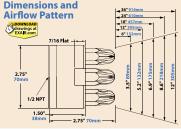


### Model 1111-7 Super Air Nozzle Cluster

Air Cons	Air Consumption		Force*	
SCFM	SLPM	Lbs	Kg	dBA
98	2,773	5.7	2.59	85
90	2,113	3.7	2.33	03

<sup>\*</sup> 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



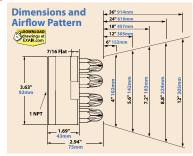


### Model 1111-12 Super Air Nozzle Cluster

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

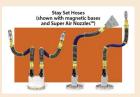


### Flexible Stay Set Hoses™

### **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 x 1/4 MNPT hose has a 1/4 NPT male fitting on each end and the 1/4 MNPT x 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.





### Product 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 Model 1122SS

2" (51mm) Flat Super Air Nozzle

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 Suner 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

9256	6" (152mm) 1/4 MNPT x 1/8 FNPT
9262	12" (305mm) 1/4 MNPT x 1/8 FNPT
9268	18" (457mm) 1/4 MNPT x 1/8 FNPT



Atto Super Air Nozzle

Atto PEEK Super Air Nozzle

Model 1109SS-NPT

Pico Super Air Nozzle

1109-PEEK-NPT

1110-PEEK-NPT

Nano PEFK Super Air Nozzle

Pico PEFK Super Air Nozzle Model 1110SS-NPT Nano Super Air Nozzle

Model 1108-PEEK-NPT

Model

Model





Model 1126 1" (25mm) SS Micro Air Nozzle 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 9286



Description



Model #

9274

Model 1103



24" (610mm) 1/4 MNPT x 1/8 FNPT





Mini Super Air Nozzle Adjustable Air Nozzle Model 1103SS Model 1009SS SS Mini Super Air Nozzle SS Adjustable Air Nozzle

Model 6013SS SS High Velocity

Model 6019 High Velocity Air Jet 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#.



1122 (2" Flat Super Air Nozzle)

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			
l	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.





9042 One Outlet Magnetic Base 9043 Two Outlet Magnetic Base







