

Air Nozzles and Jets

An **INTELLIGENT**
COMPRESSED AIR®
Product

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.

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



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.

Air Nozzles

Atto Super Air Nozzles™



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 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		Force*		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)
All measurements taken at 80 PSIG (5.5 BAR)



Pico Super Air Nozzles™



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™



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™



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

Model 1010SS Micro Air Nozzle

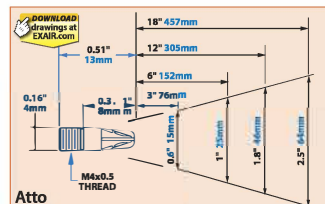
EXAIR's Micro Air Nozzle optimizes entrainment for a directed, high volume, high velocity airflow. The compact size permits mounting where space is limited. Sound level and air consumption are low.

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

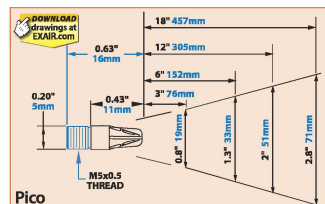
*Force measured at 12" (305mm) from target.
Sound level measured at 3' (914mm)
All measurements taken at 80 PSIG (5.5 BAR)

The Air Nozzles and Jets shown on pages 50 – 56 deliver up to 22 ounces (624 grams) 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.

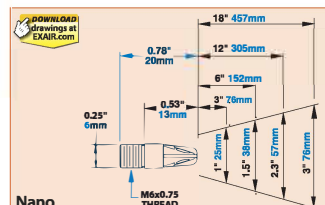
Dimensions and Airflow Patterns



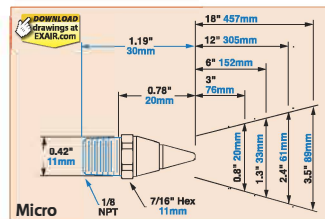
Atto



Pico



Nano



Micro

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

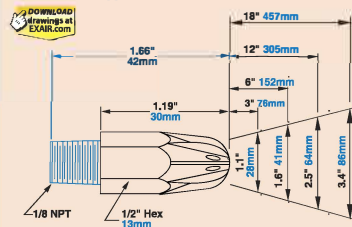
The 1/8 NPT Mini Super Air Nozzles provide a forceful, concentrated stream of high velocity airflow. It has fewer holes than the larger Super Air Nozzles, resulting in lower sound levels, air consumption and force.

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)



Dimensions and Airflow Pattern



Air Nozzles
& Jets

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

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

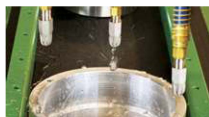
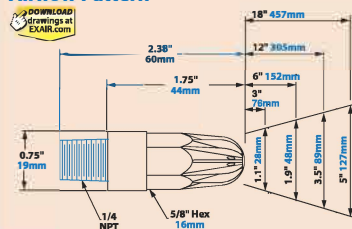
EXAIR's award winning Super Air Nozzles deliver high performance suitable for a wide range of blowoff, drying and cooling applications. The aerodynamic design of this engineered Super Air Nozzle directs the air to a single point of convergence, delivering hard-hitting force. It dramatically reduces air 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		Force*		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 BAR)



Dimensions and Airflow Pattern



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



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 63 for details.



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

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



Flat Super Air Nozzles

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

Model	Air Consumption		Force *		Sound Level
	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.



A stainless steel 1" Flat Super Air Nozzle removes condensation from a label prior to scanning.



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.

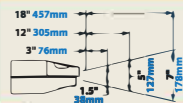
Model	Air Consumption		Force *		Sound Level
	SCFM	SLPM	Ozs	Grams	dBA
1122/1122SS	21.8	622	22	624	77

* 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.

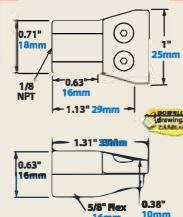


2" Flat Super Air Nozzles blow off metal parts as they are lifted through a vacuum chamber.

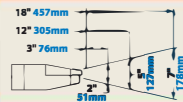
1" Flat Super Air Nozzle Airflow Pattern



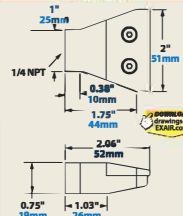
Dimensions



2" Flat Super Air Nozzle Airflow Pattern



Dimensions



Back Blow Air Nozzles

M4 Back Blow Air Nozzle



Model 1004SS M4 x 0.5

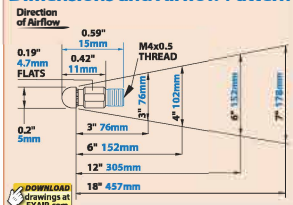
Material: Type 316 Stainless Steel

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.

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

Dimensions and Airflow Pattern



1/4 NPT Back Blow Air Nozzle



Model 1006SS 1/4 NPT female

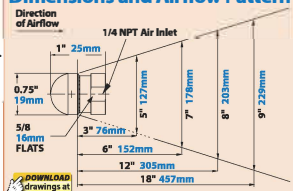
Material: Type 316 Stainless Steel

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.

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

Dimensions and Airflow Pattern



1 NPT Back Blow Air Nozzle



Model 1008SS 1 NPT female

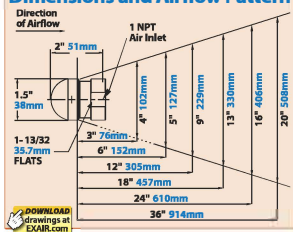
Material: Type 316 Stainless Steel

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.

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

Dimensions and Airflow Pattern



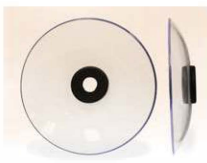
Aluminum Extension Pipe

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, M4x0.5
9493	12" (305mm) Aluminum, M4x0.5
9495	24" (610mm) Aluminum, M4x0.5
9497	36" (914mm) Aluminum, M4x0.5
9188	12" (305mm) Aluminum, 1/4 NPT
9189	18" (477mm) 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



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.

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

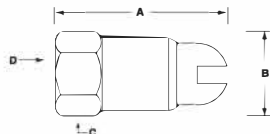
Model 1003 3/8 NPT female
Material: Brass

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	453	80
1002SS	17	481	16	453	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
	mm	30	10	13	NPT
1002 1002SS	in	1.44	0.50	5/8	1/4
	mm	37	13	16	NPT
1003	in	1.65	0.63	3/4	3/8
	mm	42	16	19	NPT

Air Nozzles
& Jets

Send in your air nozzle

for EXAIR's FREE

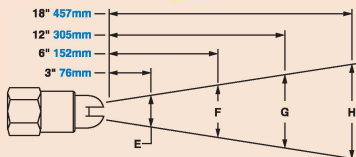


Service

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.

Airflow Pattern



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

Adjustable Air Nozzles



Model 1009 1/8 NPT male
Material: Aluminum

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

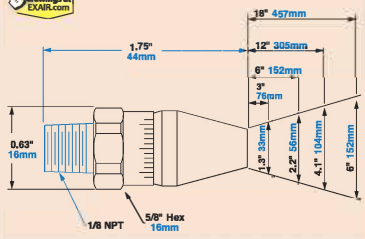
Model 1009 and 1009SS Adjustable Air Nozzles

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

Dimensions and Airflow Pattern



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 [†]	462	82	p. 58
HP1126SS	Stainless Steel - Type 316	1" High Power Flat Super Air Nozzle	1/8 FNPT	17.5	495	1 [†]	462	82	p. 58
HP1002	Brass	High Power Safety Air Nozzle	1/4 FNPT	32	906	1.8*	792	87	p. 59
HP1002SS	Stainless Steel - Type 303	High Power Safety Air Nozzle	1/4 FNPT	32	906	1.8*	792	87	p. 59
1104	Zinc Aluminum alloy	Super Air Nozzle	3/8 FNPT	35	991	1.9*	850	82	p. 59
1104SS	Stainless Steel - Type 316	Super Air Nozzle	3/8 FNPT	35	991	1.9*	850	82	p. 59
1104-PEEK	PEEK (Plastic)	Super Air Nozzle	3/8 FNPT	35	991	1.9*	850	82	p. 59
1105	Zinc Aluminum alloy	Super Air Nozzle	3/8 MNPT	35	991	1.9*	850	82	p. 59
1105SS	Stainless Steel - Type 316	Super Air Nozzle	3/8 MNPT	35	991	1.9*	850	82	p. 59
HP1125	Zinc Aluminum alloy	2" High Power Flat Super Air Nozzle	1/4 FNPT	37	1,039	2.2 [†]	1,134	83	p. 59
HP1125SS	Stainless Steel - Type 316	2" High Power Flat Super Air Nozzle	1/4 FNPT	37	1,039	2.2 [†]	1,134	83	p. 59
1111-4	Zinc Aluminum alloy	Super Air Nozzle Cluster	3/8 FNPT	56	1,585	3.2*	1,451	82	p. 62
1008SS	Stainless Steel - Type 316	Back Blow Air Nozzle	1 FNPT	57	1,614	NA	NA	89	p. 54
1106	Zinc Aluminum alloy	Super Air Nozzle	1/2 FNPT	60	1,699	3.3*	1,497	87	p. 60
1106SS	Stainless Steel - Type 316	Super Air Nozzle	1/2 FNPT	60	1,699	3.3*	1,497	87	p. 60
1107	Zinc Aluminum alloy	Super Air Nozzle	1/2 MNPT	60	1,699	3.3*	1,497	87	p. 60
1107SS	Stainless Steel - Type 316	Super Air Nozzle	1/2 MNPT	60	1,699	3.3*	1,497	87	p. 60
1112	Zinc Aluminum alloy	Super Air Nozzle	3/4 FNPT	91	2,577	4.5*	2,041	96	p. 60
1112SS	Stainless Steel - Type 316	Super Air Nozzle	3/4 FNPT	91	2,577	4.5*	2,041	96	p. 60
1113	Zinc Aluminum alloy	Super Air Nozzle	3/4 MNPT	91	2,577	4.5*	2,041	96	p. 60
1113SS	Stainless Steel - Type 316	Super Air Nozzle	3/4 MNPT	91	2,577	4.5*	2,041	96	p. 60
1111-7	Zinc Aluminum alloy	Super Air Nozzle Cluster	1/2 FNPT	98	2,773	5.7*	2,585	85	p. 62
1114	Zinc Aluminum alloy	Super Air Nozzle	1 FNPT	135	3,823	6.6*	3,005	99	p. 60
1114SS	Stainless Steel - Type 316	Super Air Nozzle	1 FNPT	135	3,823	6.6*	3,005	99	p. 60
1115	Zinc Aluminum alloy	Super Air Nozzle	1 MNPT	135	3,823	6.6*	3,005	99	p. 60
1115SS	Stainless Steel - Type 316	Super Air Nozzle	1 MNPT	135	3,823	6.6*	3,005	99	p. 60
1111-12	Zinc Aluminum alloy	Super Air Nozzle Cluster	1 FNPT	168	4,754	9.8*	4,445	89	p. 62
1116	Zinc Aluminum alloy	Super Air Nozzle	1-1/4 FNPT	188	5,324	9.4*	4,252	102	p. 61
1117	Zinc Aluminum alloy	Super Air Nozzle	1-1/4 MNPT	188	5,324	9.4*	4,252	102	p. 61
1118	Zinc Aluminum alloy	Super Air Nozzle	1-1/4 FNPT	300	8,495	15*	6,804	106	p. 61
1119	Zinc Aluminum alloy	Super Air Nozzle	1-1/4 MNPT	300	8,495	15*	6,804	106	p. 61
1120	Zinc Aluminum alloy	Super Air Nozzle	1-1/4 FNPT	460	13,026	23*	10,433	109	p. 61
1121	Zinc Aluminum alloy	Super Air Nozzle	1-1/4 MNPT	460	13,026	23*	10,433	109	p. 61

For Air Nozzles with lower force, see page 49.

* 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.

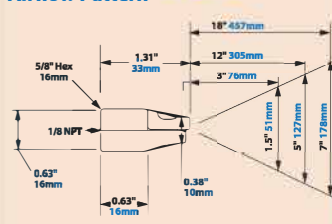
Model HP1126 and HP1126SS 1" High Power Flat Super Air Nozzles

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	462	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



The Model HP1136SSShimSet 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

**An INTELLIGENT
COMPRESSED AIR®
Product**

High Power Safety Air Nozzles™



Model HP1002 1/4 NPT female
Material: Brass

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

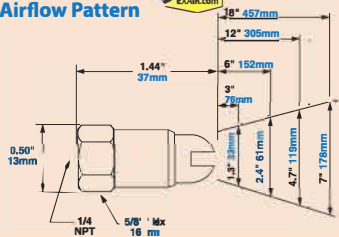
Model HP1002 and HP1002SS High Power Safety Air Nozzles

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	792	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



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

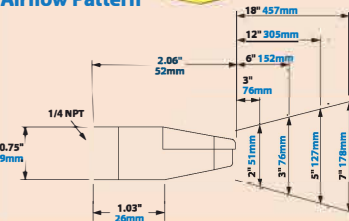
EXAIR's 2" High Power Flat Super Air Nozzles produce a flat 2" (51mm) wide airstream with a strong blowing force of 2.2 pounds (1,134 grams). The adjustable force is more than three times that of ordinary air nozzles. It uses EXAIR's patented† technology to maximize entrained airflow while reducing noise levels.

Air Consumption		Force*		Sound Level
SCFM	SLPM	Lbs	Grams	dBA
37	1,039	2.2	1,134	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



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



The Model HP1125SS 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

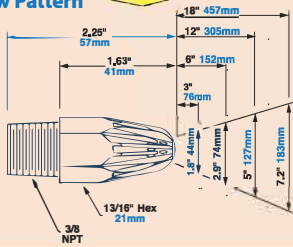
Model 1104, 1104SS, 1104-PEEK, 1105 and 1105SS 3/8 NPT Super Air Nozzles

EXAIR's 3/8 NPT Super Air Nozzles produce 1.9 lbs (850 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	850	82

* 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



High Force Air Nozzles

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

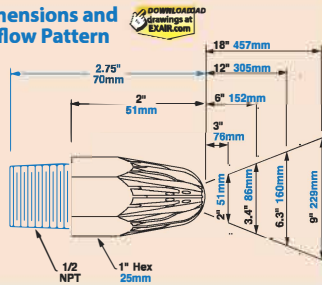
EXAIR's 1/2 NPT Super Air Nozzles produce 3.3 lbs (1.5 kg) of blowing force – 4 times that of ordinary nozzles. Air consumption and noise are extremely low compared to that of open pipe or copper tubes.

Air 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)



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

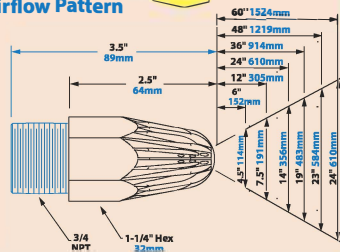
Model 1112, 1112SS, 1113 and 1113SS 3/4 NPT Super Air Nozzles

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

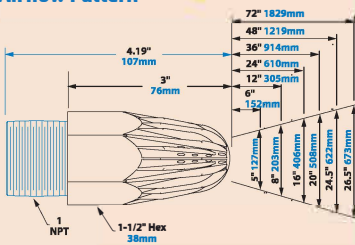
EXAIR's 1 NPT Super Air Nozzles optimize entrained airflow across the nozzle surface to minimize the noise level while providing extremely strong blowing force. They produce 6.6 lbs (3.01 kg) of blowing force – over 8 times that of ordinary nozzles.

Air Consumption		Force*		Sound Level
SCFM	SLPM	Lbs	Kg	dBA
135	3.823	6.6	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.



Dimensions and Airflow Pattern



High Force Air Nozzles



Large Super Air Nozzles™

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.



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



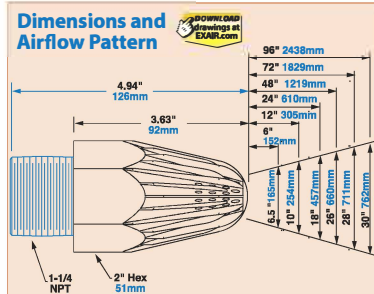
Model 1117 1-1/4 NPT male
Material: Zinc Aluminum alloy

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.



Dimensions and Airflow Pattern



Air Nozzles & Jets

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.



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

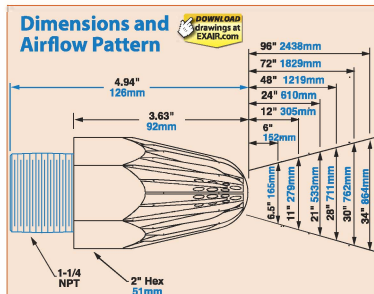


Model 1119 1-1/4 NPT male
Material: Zinc Aluminum alloy

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



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 alloy

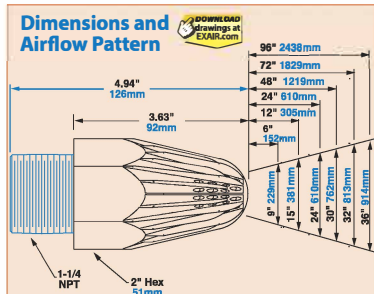


Model 1121 1-1/4 NPT male
Material: Zinc Aluminum alloy

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



Super Air Nozzle Clusters

Model 1111-4 Super Air Nozzle Cluster



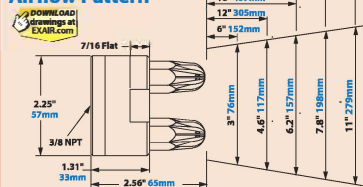
Air Consumption		Force*		Sound Level
SCFM	SLPM	Lbs	Kg	dBA
56	1,585	3.2	1.45	82

* 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



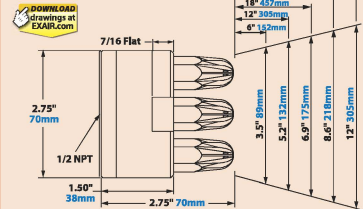
Air Consumption		Force*		Sound Level
SCFM	SLPM	Lbs	Kg	dBA
98	2,773	5.7	2.59	85

* 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



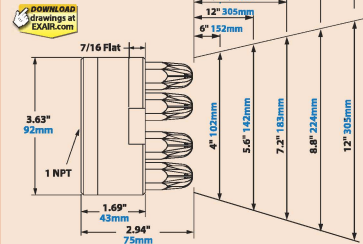
Air Consumption		Force*		Sound Level
SCFM	SLPM	Lbs	Kg	dBA
168	4,754	9.8	4.45	89

* 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 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.