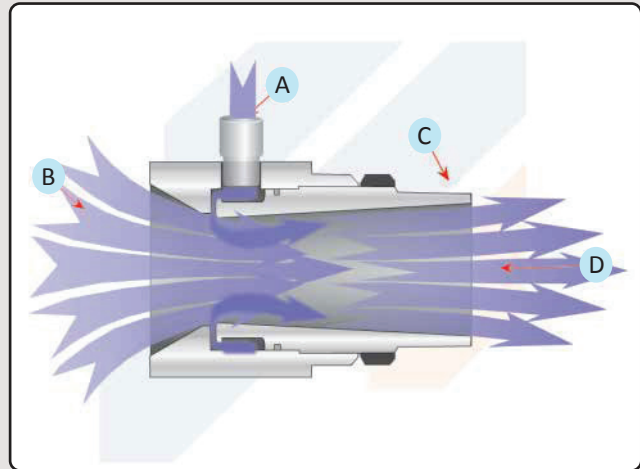


## ADJUSTABLE AIR AMPLIFIER - HOW IT WORKS:

A large volume of surrounding air is induced into the Amplifier at point (A) by the action of a small amount of compressed air which enters the annular chamber at point (B) that is then throttled through a small ring Nozzle at high velocity and into the inside of the Amplifier over a coanda profile. The compressed air stream clings to the coanda profile as it enters the inside walls of the Amplifier and thereby creating a vacuum that induces the outside air converting the pressure into amplified airflow. The amplified airflow leaves at the exit at point (C). Airflow is further amplified downstream at point (D) by entraining additional air from the surroundings at the exit.



## ADJUSTABLE AIR AMPLIFIER SPECIFICATIONS:

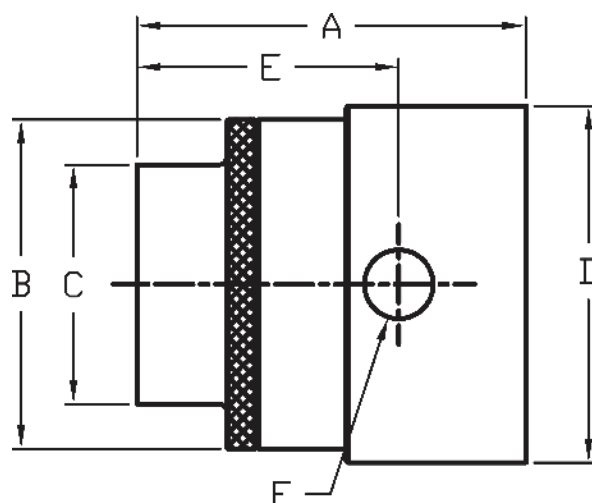
Normally set to .002" (.05mm) gap if greater air force is required, the gap is adjustable. The first two sizes of adjustable air amplifiers come in two versions – unmarked regular versions and marked to gauge the gap setting from 0 to 1.5 mm.

Adjustable Air Amplifier Ratios (approx.):	Sound Level (dBA) at 80 PSIG (5.5 BAR)
Models 40000 and 40000S: <b>10:1</b>	Model 40000, 40000S : <b>78</b>
Models 40001, 40001G, 40001S: <b>15:1</b>	Model 40001, 40001G, 40001S : <b>81</b>
Models 40002, 40002G, 40002S: <b>16:1</b>	Model 40002, 40002G, 40002S : <b>82</b>
Models 40003, 40003S: <b>17:1</b>	Model 40003, 40003S : <b>84</b>

Model	A Inches (MM)	B Inches (MM)	C Inches (MM)	D Inches (MM)	E Inches (MM)	F INLET
<b>40000 / 40000S</b>	2.22" (57)	1.25" (32)	.75" (19)	1.5" (38)	1.5" (38)	1/8" NPT
<b>40001 / 40001G / 40001S</b>	2.875" (73)	1.74" (44.2)	1.25" (31.75)	1.98" (50.3)	1.91" (48.4)	1/4" NPT
<b>40002 / 40002G / 40002S</b>	3.25" (82.6)	2.75" (69.85)	2" (50.80)	2.98" (75.7)	2.19" (55.6)	3/8" NPT
<b>40003 / 40003S</b>	5.1" (130)	5.2" (132.6)	4" (101.6)	5.5" (139.7)	3.37" (85.5)	1/2" NPT

\*BSP Threads or Adaptors can be supplied depending on country location.

## ADJUSTABLE AIR AMPLIFIER



## PERFORMANCE CHARTS

### Compressed Air Consumption (Based on gap of 0.002" (.05mm)) Consumption in SCFM. (SLPM)

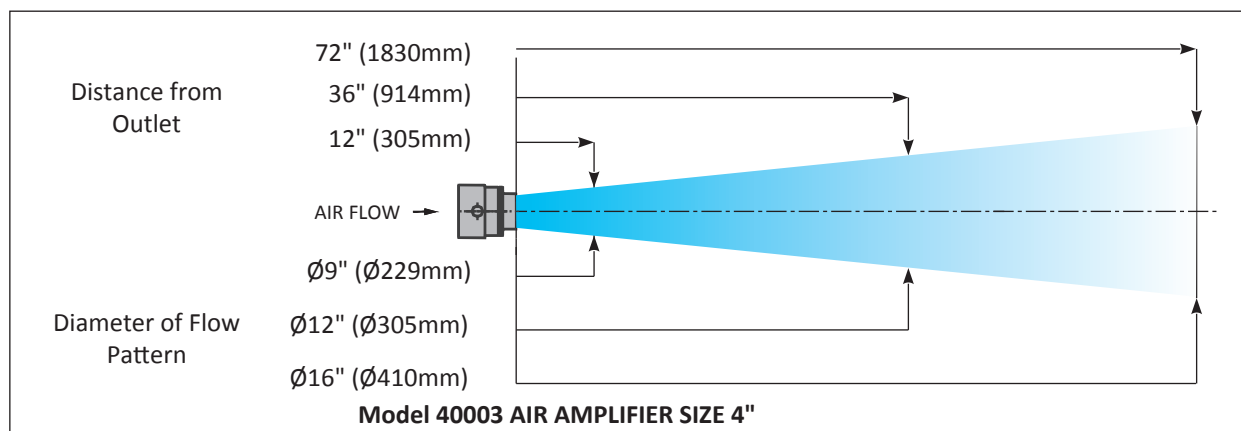
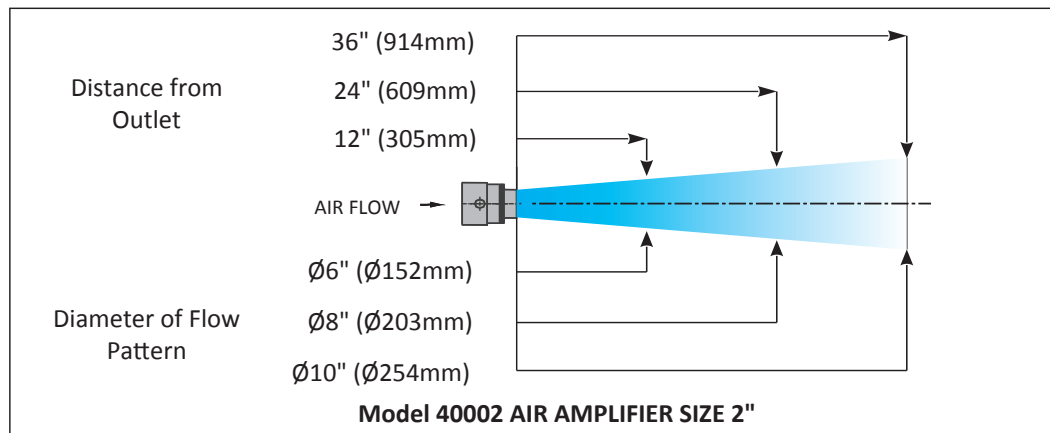
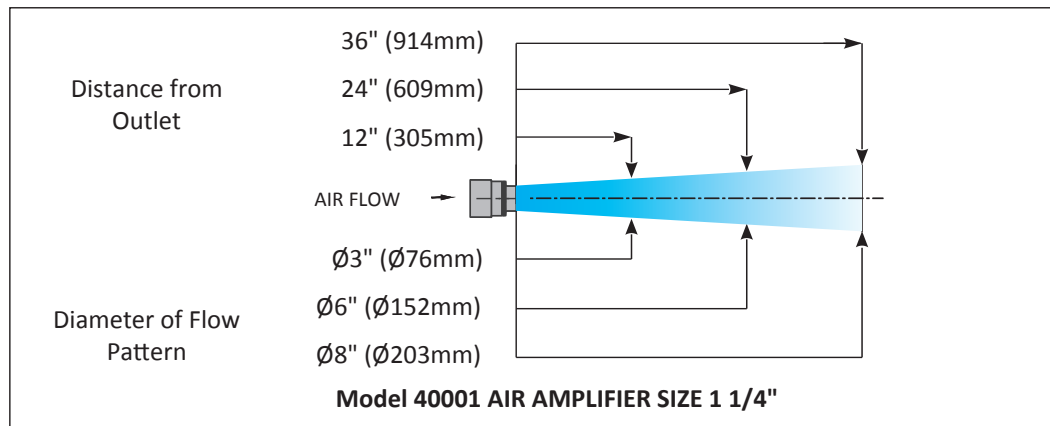
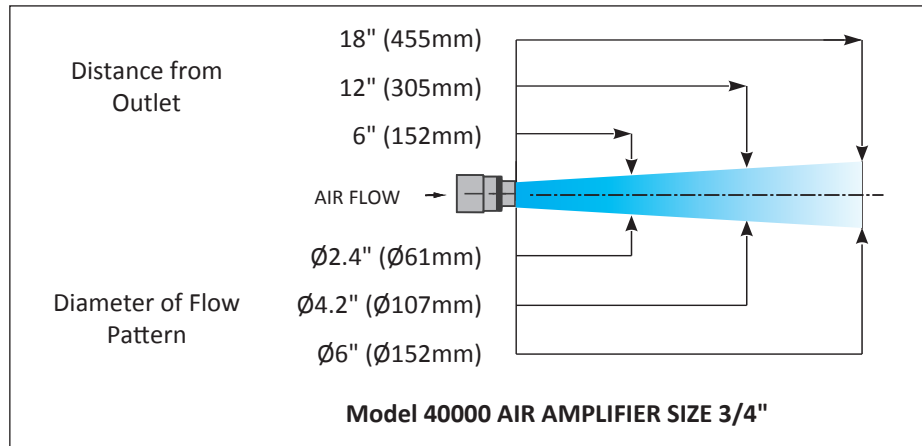
MODEL	INLET PRESSURE					
	20 PSIG (1.4 BAR)	40 PSIG (2.8 BAR)	60 PSIG (4.1 BAR)	80 PSIG (5.5 BAR)	100 PSIG (6.9 BAR)	120 PSIG (8.4 BAR)
40000 / 40000S	3.2 (91)	5.5 (156)	7.1 (201)	8.9 (252)	9.2 (260)	11.0 (311)
40001 / 40001S	4.5 (127.4)	7.5 (212.4)	10.3 (291.7)	12.5 (354.0)	14.0 (396.4)	17.5 (495.5)
40002 / 40002S	8.0 (226.5)	12.0 (339.8)	16.5 (567.2)	21.5 (608.8)	26.0 (736.2)	30.0 (849.5)
40003 / 40003S	17.5 (495.6)	28.0 (792.9)	36.8 (1042.1)	48.0 (1359.3)	59.5 (1684.9)	67.0 (1897.2)

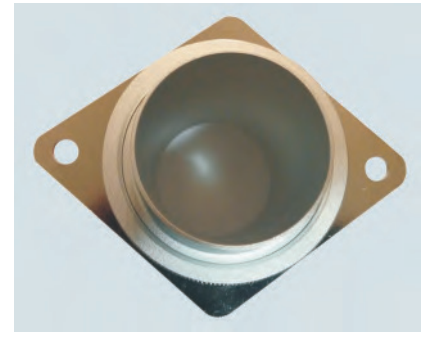
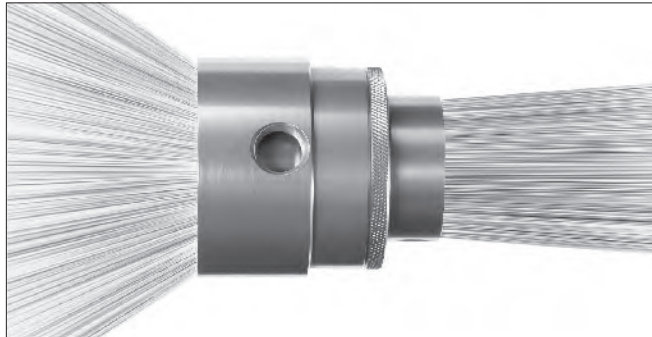
### VELOCITY OF AIR FLOW FROM ADJUSTABLE AIR AMPLIFIERS. Based on Gap setting of .002" (.05 mm) PRESSURE vs. VELOCITY AT OUTLET Ft/min (m/sec)

MODEL	INLET PRESSURE					
	20 PSIG (1.4 BAR)	40 PSIG (2.8 BAR)	60 PSIG (4.1 BAR)	80 PSIG (5.5 BAR)	100 PSIG (6.9 BAR)	120 PSIG (8.4 BAR)
40000 / 40000S	11000 (55.88)	16500 (83.82)	18000 (91.44)	21000 (106.68)	23500 (119.38)	25000 (127)
40001 / 40001S	11000 (55.88)	17000 (86.36)	21000 (106.68)	24000 (121.92)	26000 (132.08)	27000 (137.16)
40002 / 40002S	6500 (33.02)	11000 (55.88)	14500 (73.66)	17500 (88.9)	20500 (104.14)	22500 (114.3)
40003 / 40003S	2800 (14.224)	4500 (22.86)	5900 (29.972)	6900 (35.052)	7500 (38.1)	7950 (40.386)

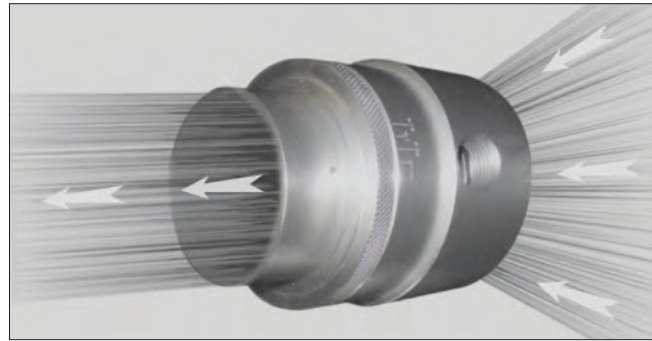
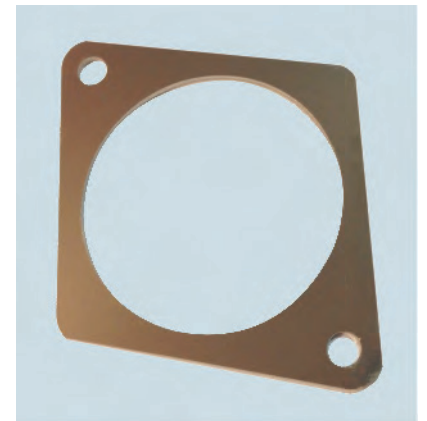
### PRESSURE vs. VELOCITY AT 12" FROM OUTLET for all sizes Ft/min (m/sec)

MODEL	INLET PRESSURE					
	20 PSIG (1.4 BAR)	40 PSIG (2.8 BAR)	60 PSIG (4.1 BAR)	80 PSIG (5.5 BAR)	100 PSIG (6.9 BAR)	120 PSIG (8.4 BAR)
40000 / 40000S	1400 (7.112)	1600 (8.128)	2000 (10.16)	2200 (11.176)	2400 (12.192)	2600 (13.208)
40001 / 40001S	1700 (8.636)	2600 (13.208)	3200 (16.256)	3650 (18.542)	3900 (19.812)	4100 (20.828)
40002 / 40002S	2150 (10.922)	3200 (16.256)	3850 (19.558)	4450 (22.606)	4850 (24.638)	5200 (26.416)
40003 / 40003S	1550 (7.874)	2300 (11.684)	2780 (14.1224)	3100 (15.748)	3250 (16.51)	3420 (17.3736)





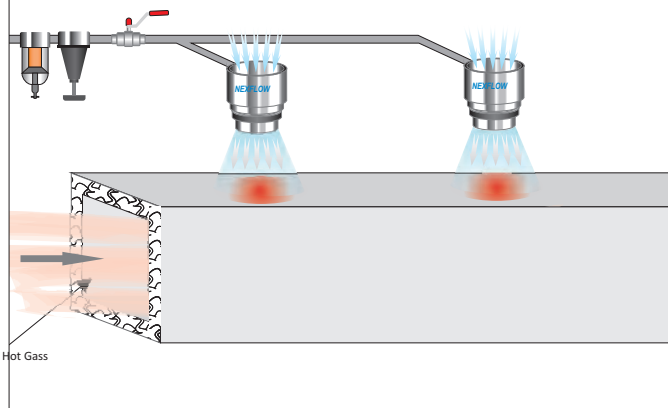
The Adjustable Air Amplifier can be adjusted to provide the blow-off force and/or vacuum required for any particular application. Made of anodized aluminum or stainless steel for corrosive and high temperature applications the unit offers flexibility in applications.



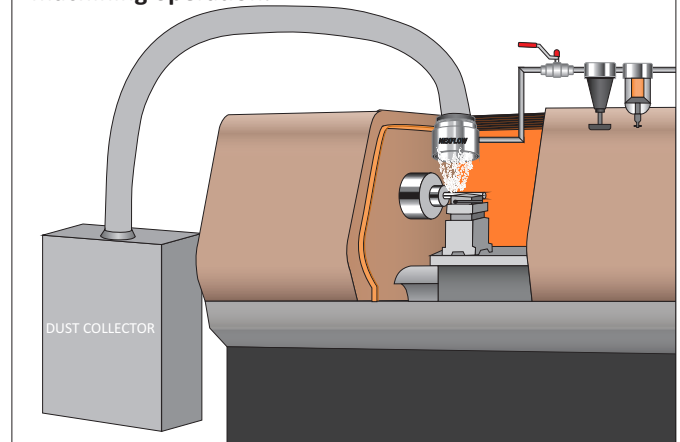
The Gauged Adjustable Air Amplifier with marking to indicate the settings from 0 to 1.5 mm comes in anodized aluminum for applications where accurate gap control is required. As with the regular adjustable unit the gaps are locked into place with a lock ring.

**Adjustable Air Amplifier mounting brackets allow for easy mounting. Available for the 1-1/4" and 2" sizes. Made in Stainless Steel.**

**Model 40002S Stainless Steel Adjustable Air Amplifiers cool hot spots on a duct where insulation has worn away until downtime can be scheduled.**



**Model 40001 Adjustable Air Amplifier vents dust from a machining operation.**



## ADJUSTABLE AIR AMPLIFIERS - ALUMINUM

PART NO.	DESCRIPTION
40000	3/4" Adjustable Aluminum Air Amplifier
40001	1-1/4" Adjustable Aluminum Air Amplifier
40002	2" Adjustable Aluminum Air Amplifier
40003	4" Adjustable Aluminum Air Amplifier
41001	1-1/4" Adjustable Aluminum Amplifier plus Filter with Auto Drain
41002	2" Adjustable Aluminum Amplifier plus Filter with Auto Drain
41003	4" Adjustable Aluminum Amplifier plus Filter with Auto drain
42001	1-1/4" Adjustable Aluminum Amplifier plus Filter with Auto Drain plus Regulator with Gauge
42002	2" Adjustable Aluminum Amplifier plus Filter with Auto Drain plus Regulator with Gauge
42003	4" Adjustable Aluminum Amplifier plus Filter with Auto Drain plus Regulator with Gauge

## ADJUSTABLE AIR AMPLIFIERS - GAUGED SETTINGS

PART NO.	DESCRIPTION
40001G	1-1/4" Adjustable Aluminum Air Amplifier with Gauged Settings
40002G	2" Adjustable Aluminum Air Amplifier with Gauged Settings
41001G	1-1/4" Adjustable Aluminum Air Amplifier with Gauged Settings plus Filter with Auto Drain
41002G	2" Adjustable Aluminum Air Amplifier with Gauged Settings plus Filter with Auto Drain
42001G	1-1/4" Adj. Aluminum Air Amplifier with Gauged Settings plus Filter with Auto Drain plus Regulator with Gauge
42002G	2" Adj. Aluminum Air Amplifier with Gauged Settings plus Filter with Auto Drain plus Regulator with Gauge

## ADJUSTABLE AIR AMPLIFIERS - STAINLESS STEEL

PART NO.	DESCRIPTION
40001S	1-1/4" Adjustable Stainless Steel Air Amplifier
40002S	2" Adjustable Stainless Steel Air Amplifier
40003S	4" Adjustable Stainless Steel Air Amplifier
41001S	1-1/4" Adjustable Stainless Steel Amplifier plus Filter with Auto Drain
41002S	2" Adjustable Stainless Steel Amplifier plus Filter with Auto Drain
41003S	4" Adjustable Stainless Steel Amplifier plus Filter with Auto Drain
42001S	1-1/4" Adjustable Stainless Steel Amplifier plus Filter with Auto Drain plus Regulator with Gauge
42002S	2" Adjustable Stainless Steel Amplifier plus Filter with Auto Drain plus Regulator with Gauge
42003S	4" Adjustable Aluminum Steel Amplifier plus Filter with Auto Drain plus Regulator with Gauge
40001 MTS	Mounting bracket for 40001, 40001G and 40001S
40002MTS	Mounting bracket for 40002, 40002G and 40002S