

Inch

Pouce

Air Nozzles / Pneumatic Silencers

Buses d'air / silencieux pneumatiques

High Thrust Air Nozzles Buses d'air à pression élevée

Description

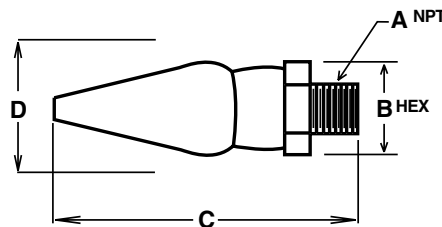
High Thrust Air Nozzles are designed for low noise, high thrust, and maximum efficiency. Low compressed air use saves energy while producing extremely high thrust and back pressure. Outside air is entrained to the extent that the air output is more than 45 times the compressed air input. Noise is reduced as much as 25 dB (A) when compared to a 3 inch long open tube at 120 psi. All units are precision set at the factory and have no moving parts.

Application

Maximum efficiency is provided by Nozzles at pressures up to 150 psig, making them ideal for use in parts ejection conveying, drying, and cleaning operations. (Filter separators are necessary in lines where nozzles are used.) Aluminum construction is strong, yet lightweight, and affords corrosion resistance.

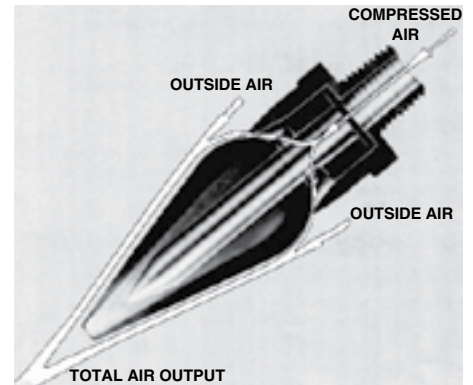
314-505 (1/8" NPT)

Air Entrainment is more than 45 times compressed air input



SPAENAUR No.	A	B	C	D	Weight
314-505	1/8"	11/16"	2-7/16"	.7"	3/4 oz.

PKG QTY. 1



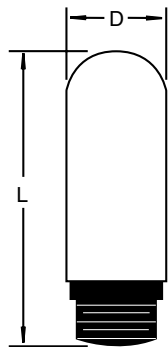
— reduce noise — increase pressure

BACK PRESSURE

As expressed by exhaust time to reduce the pressure in a one cubic foot vessel from 100 psi to 20 psi through a wide open nozzle.	1/8" NPT	24 sec.
	1/4" NPT	17.5 sec.

THRUST

Typical thrust as measured 8 inches from the nozzle on a 6 inch diameter target at 60 psi.	1/8" NPT	5.2 oz.
	1/4" NPT	6.1 oz.



Available in Five Sizes

PKG QTY. 1

SPAENAUR No.	NPT Size	Approximate Dia. L	D	Wt. Grams
314-500	1/8"	1-3/8"	5/8"	3
314-501	1/4"	1-5/8"	3/4"	5
314-502	3/8"	2-3/4"	1"	10
314-503	1/2"	2-7/8"	1"	12
314-504	3/4"	5-1/2"	1-1/2"	40

Test Data

Total discharge of 1 ft. tank (120 P.S.I. to 0 P.S.I.)

NPT Size	3" Long Pipe dB(A)	Pneumatic Silencer	Insertion Loss dB(A)
1/8"	119	85	34
1/4"	120	85	35
3/8"	120	88	32
1/2"	118	80	38

Pneumatic Silencers Silencieux pneumatiques

Reduce Air Noise !

Pneumatic Air Silencers reduce air valve noise in a safe manner, and at a low cost. These silencers are made of Porex, a tough, high-density polyethylene. This porous material allows expanding air to escape at noise levels below OSHA standards, reducing air blast to a whisper. Safety is afforded by resilient plastic which will not shatter. Threaded base is made of solid, high-density polyethylene.

Pneumatic Air Silencers can be used on any equipment discharging air. They operate at pressures up to 150 psi and are designed to fit most air valves. Silencers are easily cleaned with industrial cleaners, and are unaffected by water and oil usually present in air lines.

Test Description

For discharge time and sound pressure level tests the silencers were attached to the end of a 1/2 inch diameter pipe, 6 inches long which was attached through a valve to a one cubic foot cylindrical air tank. The tank was charged to 120 P.S.I. and then by suddenly opening the valve was allowed to discharge through the silencer.

Discharge time was measured using a stopwatch and was defined as the time for the tank back pressures to decrease from 100 P.S.I. to 20 P.S.I. Maximum A-weighted sound pressure levels and discharge times were recorded simultaneously for all tests.

Insertion loss is the difference between the noise that is generated by the tank being exhausted through a three inch long pipe and through a silencer having the same NPT size.