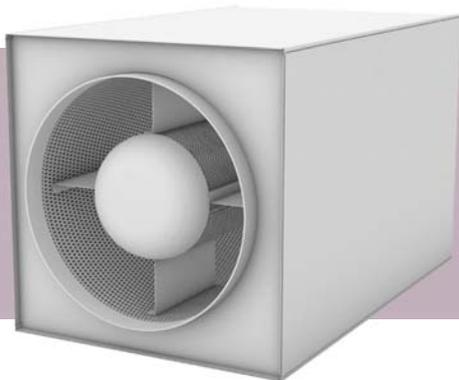


Dynasonics

Noise Control Products

Circular Silencers



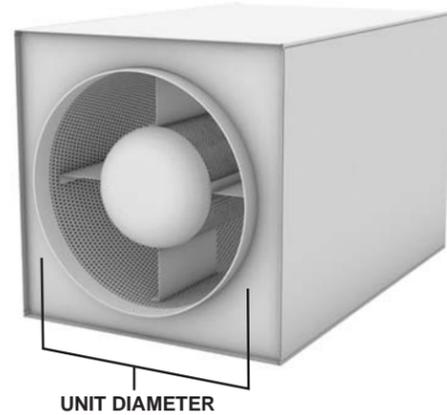
5960 West Washington Street, Phoenix, AZ 85043
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Circular Silencers

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Acoustic & Aerodynamic Performance

Dynasonics circular silencers are engineered to provide a highly configurable noise control solution tuned to meet project specific acoustic and aerodynamic requirements. By tailoring construction elements including the Unit Diameter, Pressure Class, Fill Materials and internal baffle geometries, Dynasonics provides a robust product offering backed by data collected in our NVLAP accredited Acoustical Testing Laboratory. Baffles are shown for illustration only and do not represent actual baffle quantity and/or size.



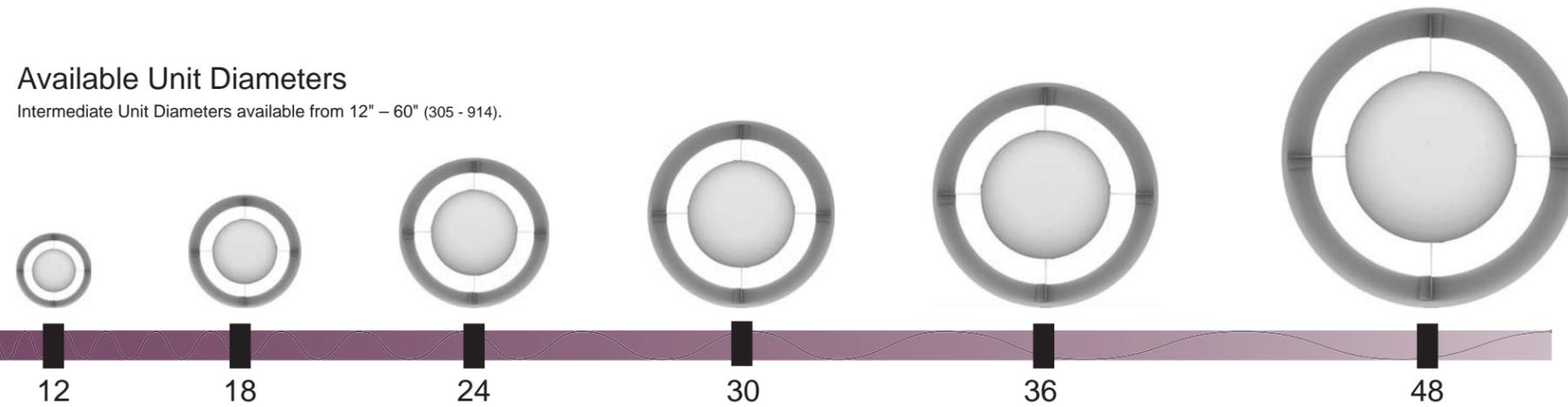
SHAPE *	FILL MATERIAL	FILL PROTECTION	DIAMETER	PRESSURE CLASS
*Extended Width option denoted in the silencer shape as "X" (RX, EX, CX).				
C CIRCULAR	F FIBERGLASS	N NONE	23	A
R RECTANGULAR	C RECYCLED COTTON	P POLYMER LINED	24	B
E ELBOW	N NO FILL	F FIBERGLASS CLOTH	25	C
			26	D
			27	E
			28	F
			29	G
				H
				I
				J

MODEL NAME
CXFN 24C

Model names define Silencer Shapes, Fill Material Options, Unit Diameters and Pressure Class to configure unique product offerings and ensure accuracy with specifications.

Available Unit Diameters

Intermediate Unit Diameters available from 12" – 60" (305 - 914).



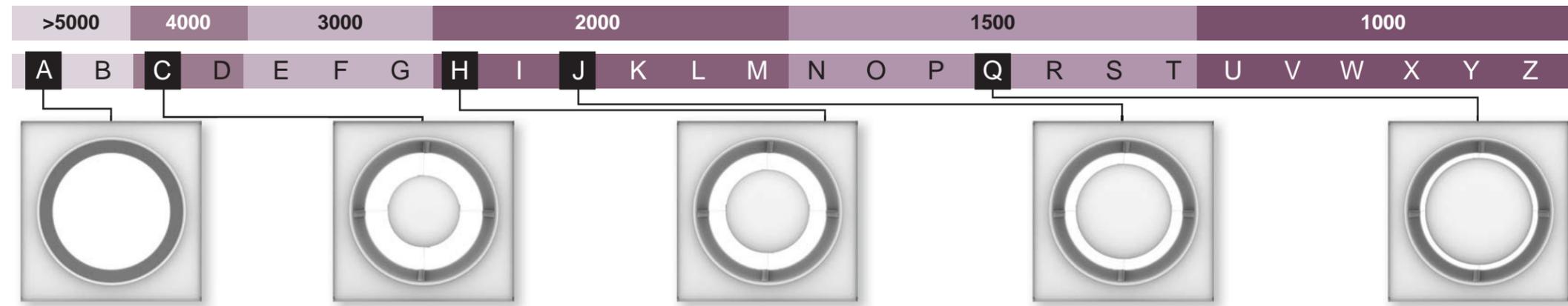
Unit Diameter

Unit Diameter refers to the diameter of the silencer duct connection and is normally selected to match the diameter of the connecting duct system.

Pressure Class

Silencer selection involves maximizing noise control performance while minimizing pressure loss. Dynasonics offers a range of Pressure Class options, which describes the balance of acoustic and aerodynamic performance.

1. Recommended Velocity Range



1. Pressure classes within nominal recommended velocity ranges yield approximate pressure drops of 0.2" to 0.35" w.g. [50 Pa to 87 Pa]

Optimal Aerodynamic Performance

Lower pressure classes use baffle configurations to minimize pressure loss.

Optimal Acoustic Performance

Higher pressure classes use baffle configurations to maximize insertion loss.

NOTE: Dimensions in parentheses () are millimeters. We reserve the right to change/modify designs and/or materials, at any time, without prior notice.

Baffle Shape

Silencer baffle shapes and internal geometries influence acoustic and aerodynamic performance. Dynasonics offers baffle shape options for a wide variety of applications. Baffles are shown for illustration only and do not represent actual baffle quantity and/or size.

Extended Casing

Noise control performance is related to casing size, with larger casing sizes providing greater control of low frequency energy. Extended Casing silencers increase the size of the casing, outside of the airstream, providing improved low frequency noise control without increasing pressure loss.



Straight

Straight baffle shape with single wall outer casing for exposed duct applications.

Straight Extended Tail Cone Bullet

Straight baffle shape with single wall outer casing and Extended Tail Cone Bullet to improve aerodynamic performance.

Straight Extended Width

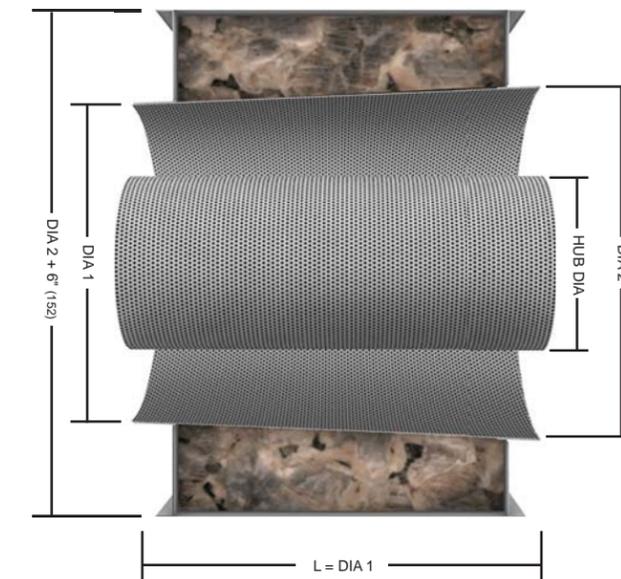
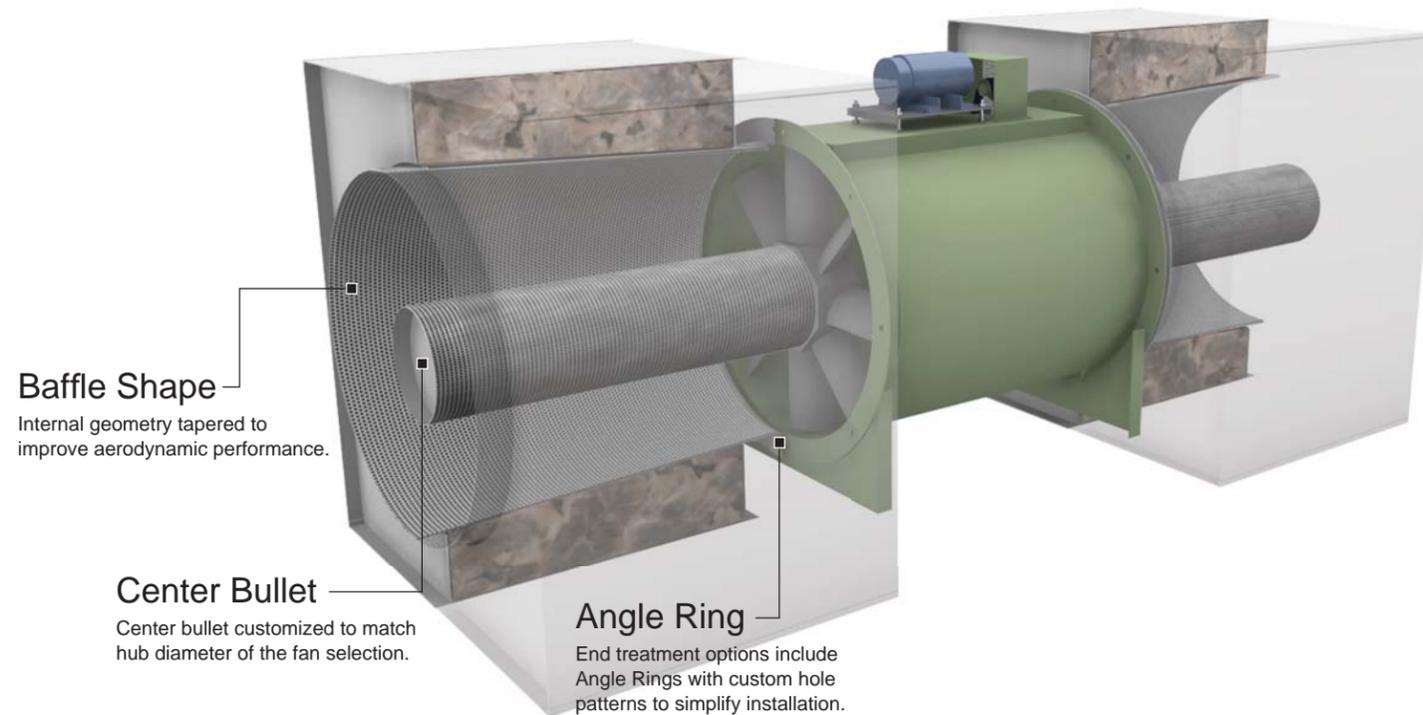
Straight baffle shape with Extended Width, dual wall, outer casing to improve acoustic performance.

Straight Extended Width Extended Tail Cone Bullet

Straight baffle shape with Extended Width, dual wall outer casing and Extended Tail Cone Bullet to improve acoustic and aerodynamic performance.

Acoustical Diffuser Cone (ADC)

Specifically designed for close coupled installation at the discharge or inlet of vane-axial fans, the Acoustical Diffuser Cone (ADC) provides noise control immediately at the noise producing equipment, and can reduce system pressure losses with its static regain design. The silencer's center bullet is customized to match the hub diameter of the fan selection, minimizing pressure losses normally attributed to conventional silencers.



Acoustical Diffuser Cone

Tapered baffle shape with Extended Width, dual wall outer casing to maximize acoustic and aerodynamic performance.

Materials

Materials of internal and external components are typically selected based on the installed condition of the silencer. Dynasonics offers a range of material options suitable for indoor, outdoor and corrosive environments including G90 Galvanized Steel, A60 Galvannealed Steel, 304-2B Stainless Steel and 316L-2B Stainless Steel. Optional heavier galvanized coating thicknesses can be provided to meet project specific requirements.

Model Key

CX	F	N	24	C
SHAPE	FILL	FILL PROTECTION	DIAMETER	PRESSURE CLASS
CONSTRUCTION OPTIONS			AERO-ACOUSTIC PERFORMANCE	

Outer Casing

The outer casing of Dynasonics circular silencers varies based upon the selected model. Circular model silencers are fabricated with spiral ductwork for exposed ductwork applications where a continuous aesthetic is required. Circular Extended Width silencers are fabricated with a square casing that provides an additional baffle assembly outside of the airstream for improved noise control performance.

Circular
22, 20 or 18 gauge outer casing based on diameter.

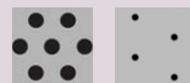


Extended Width
22, 20, 18, or 16-gauge.



Perforated Materials

The Perforated Material is an acoustically transparent screen that allows sound to pass through silencer baffles where it can be absorbed, while also providing a layer of protection against air erosion of fill materials. Alternative perforation patterns are used to maximize performance of resonant chambers for No-Fill silencers.



Perforated Materials
26, 24 (No Fill), 22, 20, 18 or 16 gauge.

Fill Materials

Noise control in duct silencers is achieved using baffle assemblies filled with a sound absorptive material or specially tuned chambers. Dynasonics offers fill material types for a range of applications.

F



Fiberglass
Fiberglass blanket insulation.

C



Recycled Cotton
Post industrial natural cotton fibers treated with EPA registered fungal inhibitor to actively resist the growth of mold, fungi and bacteria.

N

No Fill
Void of fill materials of any kind.

Fill Protection

Project requirements often require fill materials to be protected from exposure to the airstream or erosion in high velocity applications. Dynasonics offers a range of fill protection options for specific applications.

P



Polymer Film
Fill material encapsulated with polymeric film membrane (mylar, tedlar) preventing exposure to the airstream in healthcare applications.

F



Fiberglass Cloth
Fill material encased in fiberglass cloth to prevent erosion in high velocity applications.

N

None
No fill protection.

NOTE: Dimensions in parentheses () are millimeters. We reserve the right to change/modify designs and/or materials, at any time, without prior notice.

Dynasonics

About Us

Dynasonics offers a comprehensive line of noise control products used extensively in projects across the globe. For over 35 years we have been dedicated to providing the commercial and industrial acoustic markets with excellence in both products and service. Continuously improving our manufacturing techniques and equipment allows a delivery schedule second to none. Creating innovative tools that predict noise levels and simplify product selection makes Dynasonics the company to choose to get the right product for every application.

Dynasonics silencers have been acoustically and aerodynamically tested, at our in-house, NVLAP accredited Acoustical Laboratory, outfitted with state-of-the-art hardware and software tools, allowing us to conduct the testing and to determine dynamic insertion losses, self-generated sound power levels and static pressure losses in strict accordance with ASTM E477-13.