

SILENCER / SOUND ATTENUATOR (PODED & NON PODED)



Quality Speaks For Itself



PODED SILENCERS

A podded silencer is a type of noise reduction device commonly used in exhaust systems, particularly in automotive, industrial, and marine applications. It is designed to reduce the noise produced by engines or machinery by dissipating sound energy. The term "podded" refers to the construction of the silencer, where the sound-dampening material or the core structure is enclosed in a pod-like casing, making it compact and easy to install or replace.

FEATURES:

1. Compact and Lightweight Design

Podded silencers are typically designed to be compact and lightweight. The "pod" casing provides an enclosed structure that can be easily mounted or incorporated into a variety of systems. Their small size makes them ideal for applications with space constraints.

2. Effective Noise Reduction

The primary feature of a podded silencer is its ability to reduce noise. It works by absorbing, reflecting or dissipating sound waves produced by exhaust gases. This is achieved through a combination of perforated tubes, sound-absorbing materials, and baffles inside the pod, which reduce the intensity of the noise.

3. Durability and Corrosion Resistance

Podded silencers are typically made from high-quality materials like stainless steel or aluminum, which are resistant to the high temperatures, moisture, and corrosive gases found in exhaust systems. This makes them highly durable and able to withstand the harsh environments in which they are used.

4. Customization and Variability

Podded silencers can be customized based on the specific needs of the application. They come in various sizes and configurations to fit different exhaust systems. The noise attenuation level, size of the casing, and the materials used can be tailored to meet specific operational requirements or regulatory standards.

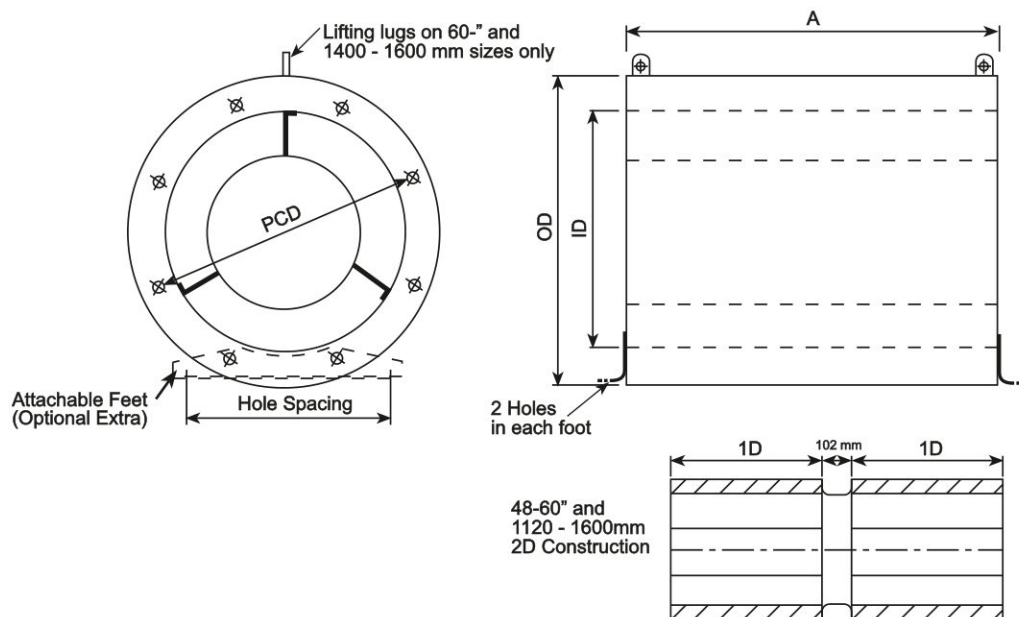
5. Easy Installation and Maintenance

Podded silencers are typically easy to install and maintain. Their modular design means that they can be replaced or serviced without requiring significant modification to the rest of the exhaust system. This reduces downtime and maintenance costs for operators.

6. High Temperature Resistance

Podded silencers are engineered to handle high-temperature exhaust gases, often exceeding 500°C in certain industrial or automotive applications. The materials used in their construction are specifically chosen for their ability to withstand these extreme temperatures without degradation over time.

2D DRAWING



APPLICATIONS

- Automotive Industry**

In vehicles, podded silencers help minimize the noise generated by the engine and exhaust system, contributing to a quieter driving experience and helping manufacturers meet noise emission standards set by regulatory bodies.

- Marine Applications**

In boats, yachts, and ships, podded silencers are used to reduce engine noise, ensuring a quieter environment both onboard and in the surrounding waters. This is especially important in recreational and luxury vessels.

- Industrial Machinery and Power Generators**

Podded silencers are widely used in industrial settings, including power plants, compressors, and generators, where controlling noise levels is essential for worker comfort and compliance with environmental noise standards.

- **Construction and Agricultural Equipment**

Heavy construction and agricultural machinery, such as excavators, bulldozers, and harvesters, often feature podded silencers to reduce noise on construction sites or farms, contributing to a safer and more pleasant working environment.

- **Compressors and HVAC Systems**

In industrial air compressors and HVAC (heating, ventilation, and air conditioning) systems, podded silencers help control the noise generated by air movement and mechanical operation, ensuring that these systems can be used in noise-sensitive environments.

DIMENSION TABLE

mm	Metric - Dimensions (mm)							Weight kg				
Size (D)	OD	No of Holes	PCD	Thread	Mounting Foot Holes		A Length		B		C	
					Dia	Spacing	1D	2D	1D	2D	1D	2D
280	385	4	320	M8	10	230	280	560	9	14	-	-
315	415	8	355	M8	10	265	315	630	10	17	13	19
355	455	8	395	M8	10	305	355	710	12	20	15	24
400	500	8	450	M10	10	350	400	800	15	25	18	30
450	600	8	500	M10	10	400	450	900	20	33	24	39
500	650	12	560	M10	10	450	500	1000	25	41	29	48
560	710	12	620	M10	10	510	560	1120	30	50	35	58
630	780	12	690	M10	12	580	630	1260	35	61	42	72
710	860	16	770	M10	10	660	710	1420	44	76	53	90
800	1000	16	860	M10	12	750	800	1600	55	96	66	116
900	1100	16	970	M12	12	850	900	1800	70	129	84	150
1000	1200	16	1070	M12	12	950	1000	2000	82	157	100	182
1120	1320	20	1190	M12	16	1070	1020	2342	100	211	118	247
1250	1450	20	1320	M12	16	1150	1219	2540	127	266	147	306
1400	1600	20	1470	M12	16	1300	1400	2902	199	399	220	453
1600	1800	24	1680	M16	16	1500	1600	3302	311	637	362	739



NON-PODED SILENCERS

A non-podded silencer is a type of exhaust system designed to reduce noise, control emissions, and enhance the overall performance of engines and industrial machinery. Unlike pod-style silencers that are compact, non-podded silencers tend to have a more open or modular design, making them suitable for larger engines or machinery that require more extensive exhaust management. These silencers are typically used in various sectors where effective noise control and exhaust gas



FEATURES:

1. Noise Reduction

Non-podded silencers are primarily designed to reduce noise generated by the engine or machinery exhaust. These systems use baffles, perforated tubes, and sound-absorbing materials to reduce the intensity of the sound emitted from the exhaust.

2. Durability

Made from durable materials like stainless steel or other corrosion-resistant metals, non-podded silencers are built to withstand high temperatures and harsh environmental conditions, ensuring a long service life

3. Increased Air movement

These silencers typically have a design that allows for optimized airflow. They can handle larger volumes of exhaust gases compared to smaller, pod-style silencers, which makes them ideal for high-power engines or industrial systems.

4. Versatility in Design

Non-podded silencers come in a variety of sizes and configurations, making them adaptable to different types of engines and equipment. Their flexible design allows for custom modifications, ensuring they can be tailored to meet specific noise reduction and performance requirements.

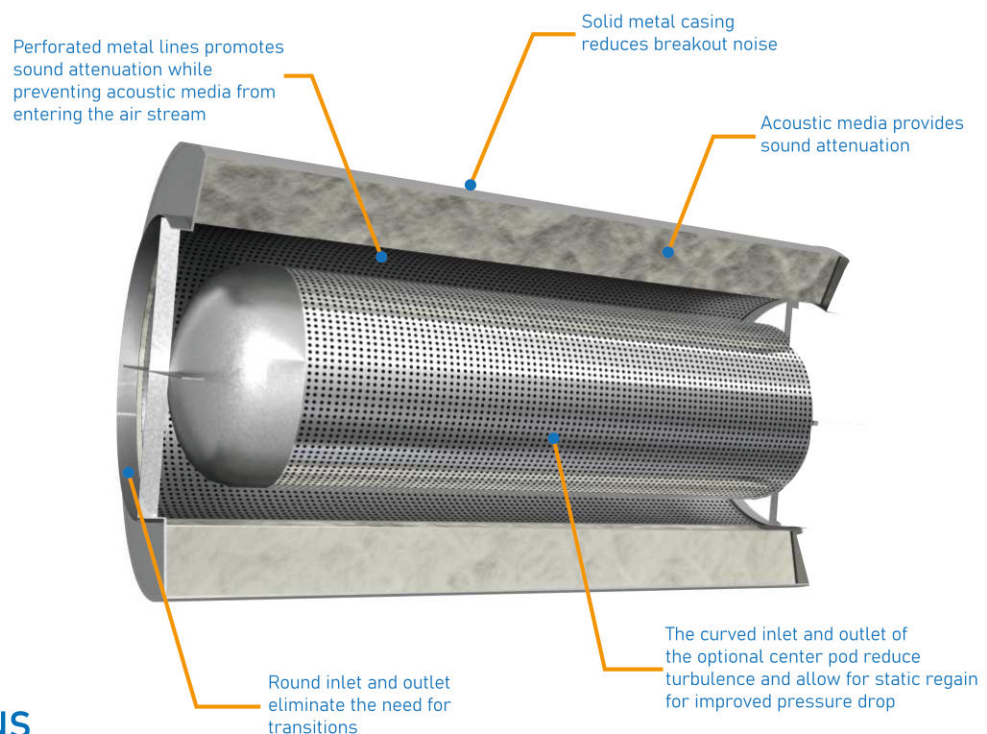
5. Temperature Control

They often incorporate elements that help control exhaust temperature, ensuring that gases are released safely without overheating or causing damage to surrounding components.

6. Regulatory Compliance

These silencers are designed to meet environmental noise regulations and emission standards, making them suitable for industries that require compliance with noise and emission reduction laws.

2D DRAWING



APPLICATIONS

• Industrial Machinery

In factories and industrial settings, machinery such as compressors, turbines, and large engines generate significant noise. Non-podded silencers help mitigate this noise while managing the large volumes of exhaust gases produced by these systems.

• Heavy Equipment (Construction & Mining)

Non-podded silencers are used in construction vehicles like bulldozers, cranes, and excavators, as well as mining equipment. These machines often work in noisy environments, and silencers help reduce the operational noise and comply with workplace noise standards.

- **Marine Engines**

Non-podded silencers are essential in marine applications, where they are used on boats, ships, and offshore equipment. The ability to reduce noise and handle large exhaust volumes makes them critical in marine environments, where noise pollution and emissions need to be controlled.

- **Power Generation**

In power plants, non-podded silencers manage the exhaust from generators and turbines. These silencers help ensure that noise levels are kept within acceptable limits while maintaining the efficiency and safety of the exhaust system.

- **HVAC and Ventilation Systems**

Non-podded silencers are widely used in HVAC and ventilation systems to reduce noise generated by high-capacity fans and blowers. They help control airflow noise while allowing large volumes of air to pass through with minimal pressure drop, making them suitable for commercial and industrial buildings.

- **Oil and Gas Industry**

In oil and gas processing facilities, non-podded silencers are used on compressors, flaring systems, and exhaust stacks to reduce high noise levels. Their robust construction allows them to withstand high temperatures, pressure fluctuations, and harsh operating environments.

- **Process Industries and Manufacturing Plants**

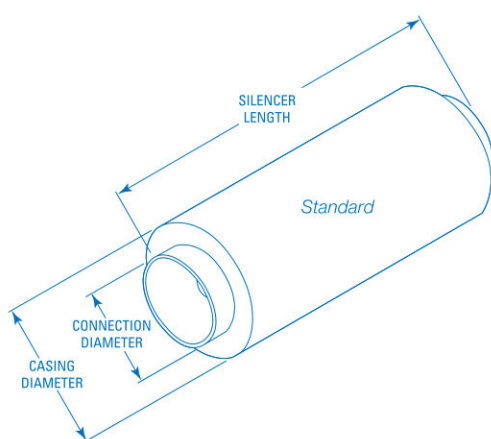
Non-podded silencers are applied in cement plants, steel plants, chemical processing units, and refineries to attenuate noise from process exhausts, blowers, and ducts. They help industries meet environmental noise regulations while maintaining continuous operation.

- **Test Cells and Engine Testing Facilities**

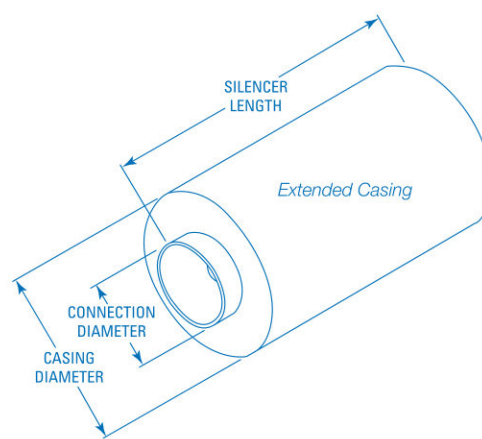
Engine test beds and performance testing facilities use non-podded silencers to control high noise levels generated during testing of engines, turbines, and mechanical equipment. These silencers ensure safe working conditions and compliance with occupational noise standards.

DIMENSION TABLE

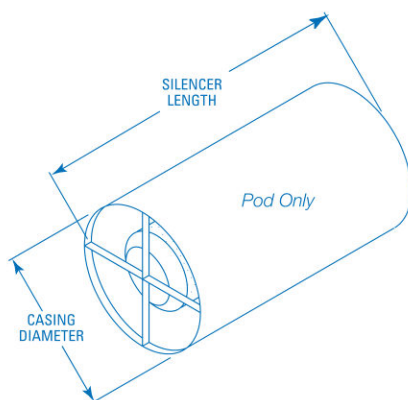
CS silencers are built to match duct dimensions, therefore the diameter and length dimensions for the silencer must always be specified, Please consult the Standard Dimension Limits chart for available sizes.



Casing diameter will be 8 inches larger than the connection diameter.



Casing diameter will be 16 inches larger than the connection diameter.



Casing diameter will be equal to the connection diameter.

Standard Dimensions

Connection Diameter		Length		Minimum Casing Gauge
Min	Max	Min	Max	
6	20	24	79	22
6	44	24	120	18
6	60	24	120	16

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GUARANTEES

HUMIDIN guarantees its products to be free of defects in materials and workmanship for a period of one year from the date of delivery from the factory, provided motors are properly installed with overload protector. Humidin agrees to repair or replace defective parts or part to be returned to the factory, all transportation charges prepaid. Humidin does not guarantee against abrasion, corrosion or erosion. Humidin shall not be held responsible for any charges in connection with the removal or replacement of alleged defective equipment nor for incidental consequential damages

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