# Conabeare Acoustics Quality Noise Control Solutions



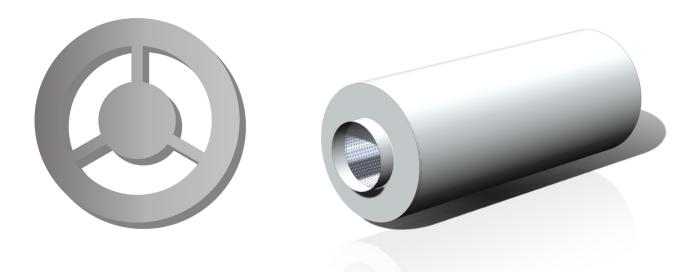
### **INTRODUCTION**

Type **ACS** Series Cylindrical Attenuators are generally used for ducted systems or items of plant to provide a high level of attenuation whilst allowing passage of air to or from the equipment being treated.

Whilst all **ACS** Series Cylindrical Attenuators are selected to suit particular criteria, in general these are used for higher performance or applications where they are to connect directly to Axial Fans.

The Cylindrical Attenuators are efficient at providing Cross Talk protection as well as being suitable for circular duct cross sections.

All attenuators are designed to suit your individual project and our Team of Sales Engineers can assist with the design of the attenuation package for the optimum product selection.



#### **DESIGN AND MANUFACTURE**

The **ACS** Series Cylindrical Attenuators are designed and fabricated to suit particular projects to take into account the specific sound reduction requirements for both Octave and Broad Band noise, regenerated noise and airflow characteristics, such as, the effect on other equipment, and pressure drop.

The attenuators are fabricated in line with DW144 and can be varied to suit high pressure or industrial grade systems as well as bespoke applications.

End connections can either be spigots or threaded inserts for direct connection to plant.

The attenuators are manufactured for stability and integrity at High Temperatures.



Cylindrical Attenuators - ACS Series

# **Conabeare Acoustics**

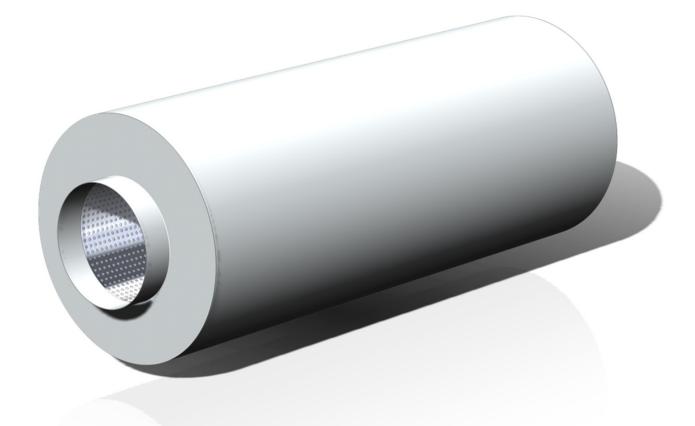
**Quality Noise Control Solutions** 

## **TYPICAL DETAILS**

Type **ACS** Series Attenuator.

Manufacturer: Attenuator Type: Outer Skin:	Conabeare Acoustics Limited - <u>0118 930 3650</u> . <b>ACS</b> Series Cylindrical Attenuator. Pre-Galvanised Steel Sheet Outer Skin.
Acoustic Lining:	45kg/m <sup>3</sup> density mineral wool retained behind a glass fibre tissue facing and expanded or perforated metal skin having minimum 30% free area.
Connections:	Spigot.
Finish:	Mill Finish as Standard.
Description:	Fabricated Steel Attenuator comprising pre-galvanised steel components throughout. Attenuator to be factory assembled using mechanical fixings and supplied in one section to be incorporated into the works.

# **TYPE ACS CYLINDRICAL ATTENUATOR**



ACS Cylindrical Attenuator (Spigot)



# PERFORMANCE DATA

Type ACS Series (Straight Through) Cylindrical Attenuators have the following Acoustic Performance.

Insertion (dB) at Octave Band Centre Frequencies (Hz)										
NOMINAL BORE	63	125	250	500	1000	2000	4000	8000	Length (mm)	Weight (kg)
ACS 100	5	7	12	26	37	36	26	19	500	5.3
ACS 125	4	6	11	25	35	33	23	17	500	6.1
ACS 150	5	7	14	28	37	36	25	18	750	9.1
ACS 160	5	7	13	27	35	34	23	17	750	9.6
ACS 180	4	6	12	26	33	32	20	15	750	10.5
ACS 200	5	7	15	29	35	33	21	18	1000	14
ACS 224	5	7	14	26	32	28	19	15	1000	15.3
ACS 250	4	6	13	24	30	24	17	13	1000	16.7
ACS 280	4	6	12	22	29	21	15	11	1000	18.3
ACS 300	3	5	11	21	28	20	14	10	1000	19.4
ACS 315	3	5	10	21	28	18	12	8	1000	20.2
ACS 330	3	4	9	20	27	16	10	7	1000	21
ACS 355	3	4	8	19	27	14	9	5	1000	22.4

#### MELINEX

When Melinex linings are used the following allowances should be made to the Insertion Loss Figures.

Insertion (dB) at Octave Band Centre Frequencies (Hz)									
63	125	250	500	1000	2000	4000	8000		
x 1.00	x 1.00	x 0.95	x 0.85	x 0.80	x 0.65	x 0.55	x 0.50		

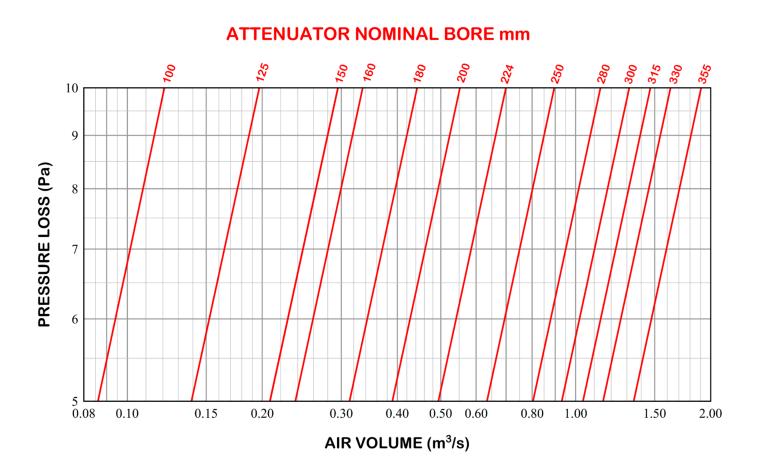
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### **PRESSURE LOSS**

The Pressure Loss through type **ACS** attenuators based on air on and off conditions being straight lengths of duct as detailed within BS EN ISO 7535:2003 are given below.



#### SUFFIX

The suffix defines additional features or special construction details

- MX Melinex Lining to Acoustic Media
- **CRP** Chlorinated Rubber Paint
- HT High Temperature
- **XT** Cross Talk Attenuator
- **ST** Stainless Steel Fabrication
- **PV** PVC Fabrication

# **Cylindrical Attenuators - ACS Series**

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