

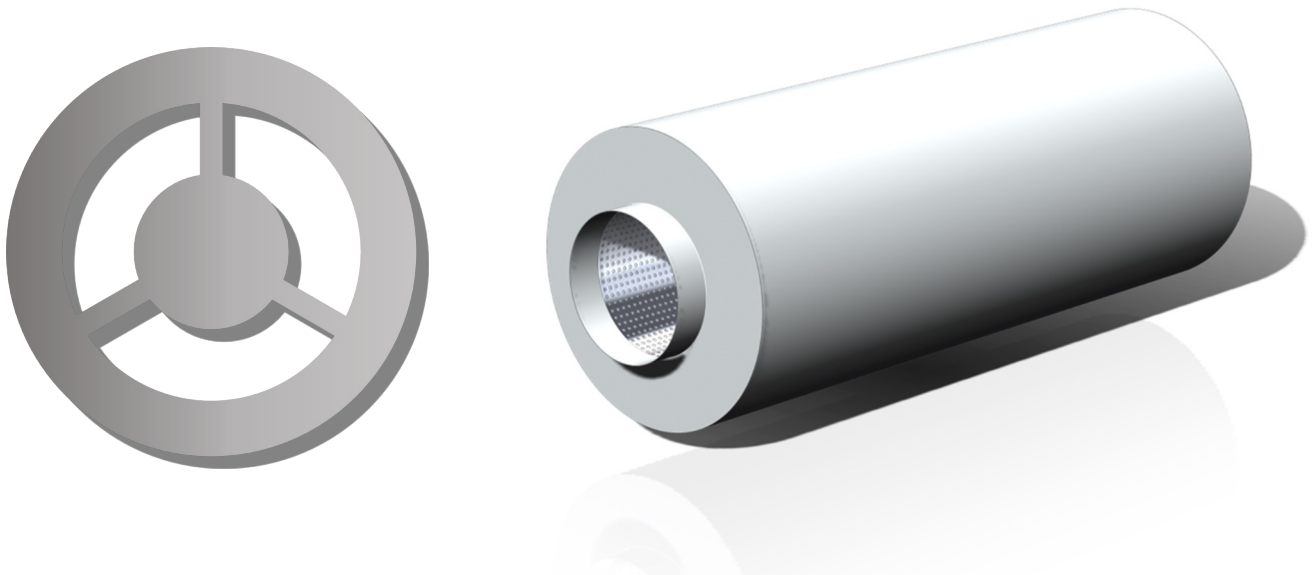
INTRODUCTION

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

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

The Cylindrical Attenuators are efficient at providing Cross Talk protection as well as being suitable for circular ducted systems.

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 **AC** 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.

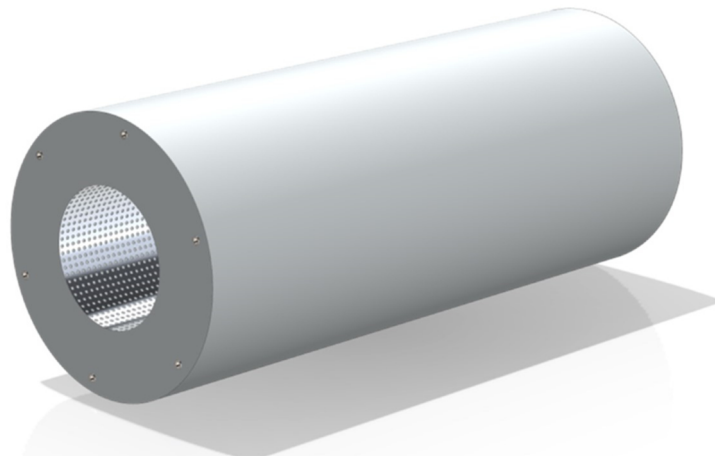


TYPICAL DETAILS

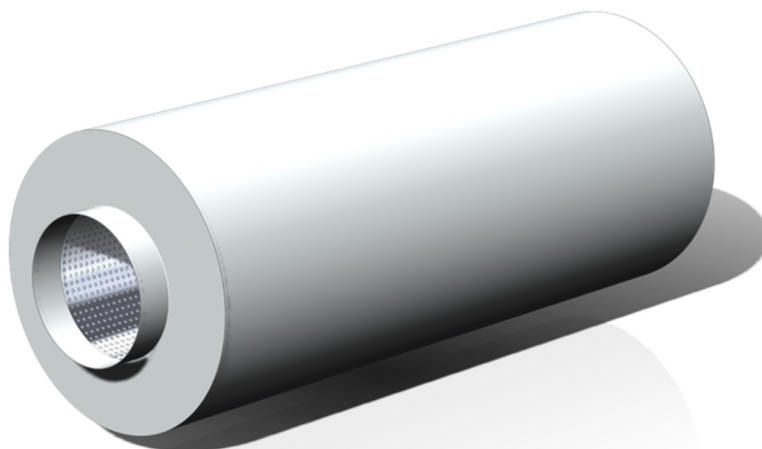
Type **AC** Series Attenuator.

| | |
|------------------|--|
| Manufacturer: | Conabeare Acoustics Limited - 0118 930 3650 |
| Attenuator Type: | AC Series Cylindrical Attenuator. |
| Outer Skin: | Pre-Galvanised Steel Sheet Outer Skin. |
| Splitters: | 45kg/m ³ density mineral wool retained behind glass fibre tissue facing and expanded or perforated metal skin having minimum 30% free area. |
| Connections: | Threaded Inserts or Spigots. |
| 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 for incorporation into works. |

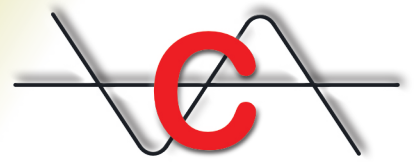
TYPE AC CYLINDRICAL ATTENUATOR



AC Cylindrical Attenuator
(Threaded Insert)



AC Cylindrical Attenuator
(Spigot)



PERFORMANCE DATA

Type AC Series (Straight Through) Cylindrical Attenuators have the following Acoustic Performance when directly connected to an Axial Flow Fan.

Insertion (dB) at Octave Band Centre Frequencies (Hz)

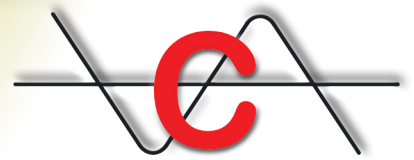
| NOMINAL BORE | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 | Length (mm) | Weight (kg) |
|--------------|----|-----|-----|-----|------|------|------|------|-------------|-------------|
| AC300 1D | 1 | 2 | 4 | 9 | 11 | 10 | 9 | 7 | 300 | 11.8 |
| AC300 2D | 2 | 2 | 5 | 13 | 18 | 12 | 11 | 10 | 600 | 16.6 |
| AC315 1D | 1 | 2 | 4 | 9 | 11 | 10 | 9 | 7 | 315 | 12.6 |
| AC315 2D | 2 | 2 | 5 | 13 | 18 | 12 | 11 | 10 | 630 | 17.7 |
| AC400 1D | 2 | 3 | 5 | 10 | 13 | 11 | 9 | 8 | 400 | 17.0 |
| AC400 2D | 3 | 4 | 7 | 14 | 18 | 15 | 11 | 12 | 800 | 24.9 |
| AC450 1D | 2 | 3 | 6 | 13 | 14 | 10 | 10 | 5 | 450 | 19.8 |
| AC450 2D | 3 | 7 | 8 | 19 | 25 | 24 | 20 | 15 | 900 | 29.7 |
| AC500 1D | 3 | 4 | 7 | 14 | 14 | 9 | 10 | 6 | 500 | 22.9 |
| AC500 2D | 4 | 7 | 10 | 20 | 24 | 20 | 17 | 14 | 1000 | 34.8 |
| AC600 1D | 3 | 5 | 7 | 15 | 13 | 8 | 9 | 6 | 600 | 29.6 |
| AC600 2D | 4 | 8 | 13 | 21 | 24 | 18 | 15 | 12 | 1200 | 46.3 |
| AC630 1D | 3 | 5 | 7 | 15 | 13 | 8 | 9 | 6 | 630 | 31.8 |
| AC630 2D | 4 | 8 | 13 | 21 | 24 | 18 | 15 | 12 | 1260 | 50.0 |
| AC800 1D | 3 | 5 | 10 | 16 | 15 | 10 | 9 | 8 | 800 | 45.5 |
| AC800 2D | 4 | 9 | 17 | 22 | 24 | 17 | 1 | 10 | 1600 | 74.0 |
| AC900 1D | 3 | 5 | 10 | 16 | 15 | 10 | 9 | 8 | 900 | 54.6 |
| AC900 2D | 4 | 9 | 16 | 22 | 23 | 16 | 13 | 10 | 1800 | 90.3 |
| AC1000 1D | 4 | 6 | 11 | 17 | 15 | 11 | 9 | 9 | 1000 | 115.0 |
| AC1000 2D | 5 | 10 | 16 | 23 | 23 | 16 | 13 | 11 | 2000 | 160.0 |
| AC1250 1D | 4 | 7 | 12 | 17 | 15 | 11 | 9 | 7 | 1250 | 160.0 |
| AC1250 2D | 6 | 11 | 21 | 25 | 24 | 19 | 13 | 10 | 2500 | 320.0 |

MELINEX

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

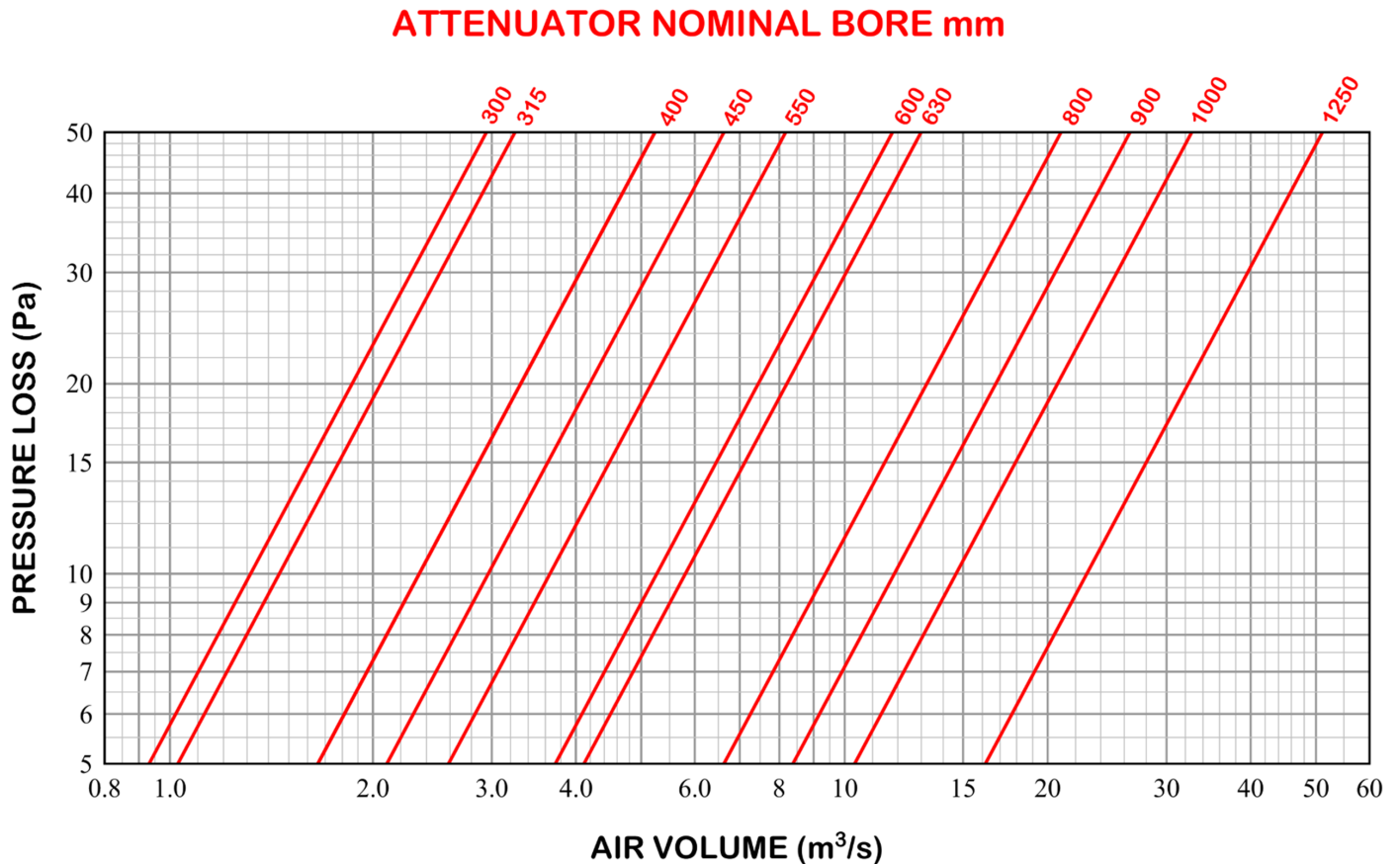
Insertion (dB) at Octave Band Centre Frequencies (Hz)

| 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 |



PRESSURE LOSS

The Pressure Loss through type **AC** 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 | Melinox Lining to Acoustic Media |
| CRP | Chlorinated Rubber Paint |
| HT | High Temperature |
| XT | Cross Talk Attenuator |
| ST | Stainless Steel Fabrication |
| PV | PVC Fabrication |

Cylindrical Attenuators - AC Series

11 Chiltern Enterprise Centre, Station Road, Theale, Berkshire. RG7 4AA.

Telephone [0118 930 3650](tel:0118 930 3650)

sales@conabeare.co.uk

Facsimile [0118 930 3912](tel:0118 930 3912)

www.conabeare.co.uk

