

Cylindrical *C series*
Spigoted *M series*

Circular Attenuators

stuartACOUSTICS

Cylindrical

C series attenuators

A full range of noise efficient, circular attenuators matched to metric axial fan sizes, fully packaged and ready to install.

C series comprise;

- Metric fan mountable
- 24 standard models
- 2 mounting hole patterns
- 250mm to 1000mm diameters
- 1 and 2 x diameter lengths
- Special versions on request
- Imperial range also available

Cylindrical attenuator

DIMENSIONS

MOUNTING HOLE PATTERNS

2 ALTERNATIVE HOLE PATTERNS ARE AVAILABLE AS STANDARD.

SPECIFY **A** OR **B**

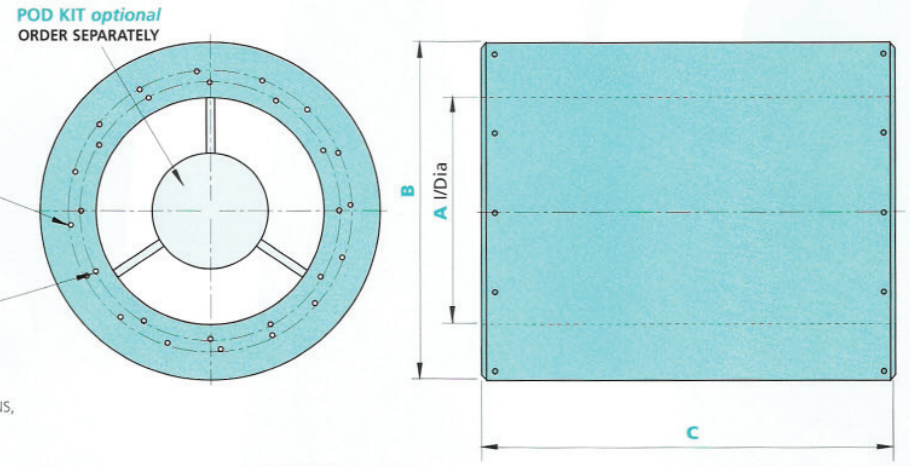
HOLE PATTERN A

D QUANTITY OF **E** THREADED INSERTS ON **F** P.C.D

HOLE PATTERN B

G QUANTITY OF **H** THREADED INSERTS ON **I** P.C.D

NB ALTERNATIVE HOLE PATTERNS, ARE AVAILABLE ON REQUEST



NOM FAN SIZE Ømm	C SERIES ORDER CODES		DIMENSIONS									WEIGHT	
	C SERIES EXCLUDING POD	POD KIT ONLY	A	B	C	D	E	F	G	H	I	EXCL POD KIT	POD KIT
250	1100-C*1-0250	1105-PK1-0250	250	411	250	8	M6	286	6	M6	286	7	2
250	1100-C*2-0250	1105-PK2-0250	250	411	500	8	M6	286	6	M6	286	11	2
315	1100-C*1-0315	1105-PK1-0315	315	452	315	8	M8	355	8	M8	355	9	2
315	1100-C*2-0315	1105-PK2-0315	315	452	630	8	M8	355	8	M8	355	15	2
355	1100-C*1-0355	1105-PK1-0355	355	509	355	8	M8	395	8	M8	395	11	2
355	1100-C*2-0355	1105-PK2-0355	355	509	710	8	M8	395	8	M8	395	18	3
400	1100-C*1-0400	1105-PK1-0400	400	553	400	8	M10	450	12	M8	438	13	3
400	1100-C*2-0400	1105-PK2-0400	400	553	800	8	M10	450	12	M8	438	22	4
450	1100-C*1-0450	1105-PK1-0450	450	602	450	8	M10	500	12	M8	487	15	3
450	1100-C*2-0450	1105-PK2-0450	450	602	900	8	M10	500	12	M8	487	27	4
500	1100-C*1-0500	1105-PK1-0500	500	653	500	12	M10	560	12	M8	541	18	4
500	1100-C*2-0500	1105-PK2-0500	500	653	1000	12	M10	560	12	M8	541	32	5
560	1100-C*1-0560	1105-PK1-0560	560	713	560	12	M10	620	16	M10	605	22	4
560	1100-C*2-0560	1105-PK2-0560	560	713	1120	12	M10	620	16	M10	605	39	7
630	1100-C*1-0630	1105-PK1-0630	630	785	630	12	M10	690	16	M10	674	26	6
630	1100-C*2-0630	1105-PK2-0630	630	785	1260	12	M10	690	16	M10	674	48	9
710	1100-C*1-0710	1105-PK1-0710	710	864	710	16	M10	770	16	M10	751	32	7
710	1100-C*2-0710	1105-PK2-0710	710	864	1420	16	M10	770	16	M10	751	59	12
800	1100-C*1-0800	1105-PK1-0800	800	955	800	16	M10	860	24	M10	837	40	9
800	1100-C*2-0800	1105-PK2-0800	800	955	1600	16	M10	860	24	M10	837	74	16
900	1100-C*1-0900	1105-PK1-0900	900	1106	900	16	M12	970	24	M10	934	55	12
900	1100-C*2-0900	1105-PK2-0900	900	1106	1800	16	M12	970	24	M10	934	102	21
1000	1100-C*1-1000	1105-PK1-1000	1000	1207	1000	16	M12	1070	24	M10	1043	66	16
1000	1100-C*2-1000	1105-PK2-1000	1000	1207	2000	16	M12	1070	24	M10	1043	124	27

* Specify A or B to suit mounting hole pattern required – refer to drawing above

C series Cylindrical Attenuators

A comprehensive range of cylindrical attenuators, matched to fit directly to all types of metric axial fan flanges or to ducting via optional matching flanges. Two alternative sets of threaded inserts are incorporated into the end faces of each attenuator to match most fan mounting requirements (see drawing for A and B hole patterns).

Available as standard in lengths of one x diameter (suffix 1) or two x diameter (suffix 2).

Excellent attenuation properties are achieved using sound absorbing acoustic infill, which is glass tissue faced as standard to minimise fibre migration and retained within the attenuator casing by a perforated liner.

- Standard sizes 250mm to 1000mm diameter
- Special sizes on request
- Supplied fully packaged, boxed or palletised
- Maximum temperature 200°C (standard construction)
- Maximum pressure 1500 Pa

Material and finish

Casing; galvanised mild steel (BS2989), seams are sealed lockformed type with spun galvanised steel end rings.
Inner lining; perforated galvanised mild steel (BS2989).
Sound absorbing material; mineral fibre slabs, faced with glass tissue.
Manufactured to HVCA specification DW142 class B and M&E 100 for sheet steel thickness and stiffening.

Pod kits – optional (can be retro-fitted)

Centrally mounted into the C series attenuators, with aerodynamic profile on each end. They substantially improve acoustic performance across the entire sound spectrum - refer to Attenuation Data. Supplied with all required fittings, installation is quick and easy.

Material and finish

Central duct; perforated galvanised mild steel (BS2989).
End cones; spun, galvanised steel.

Melinex lining – optional

Where moist or greasy ambient conditions exist (e.g. kitchen systems) or for critically clean applications (e.g. hospitals) the sound absorbing material may be required to be fully sealed by Melinex lining to prevent any fibre migration. This will however, affect the acoustic performance of the silencer. Please contact Stuart Acoustics to discuss your requirements.

Accessories

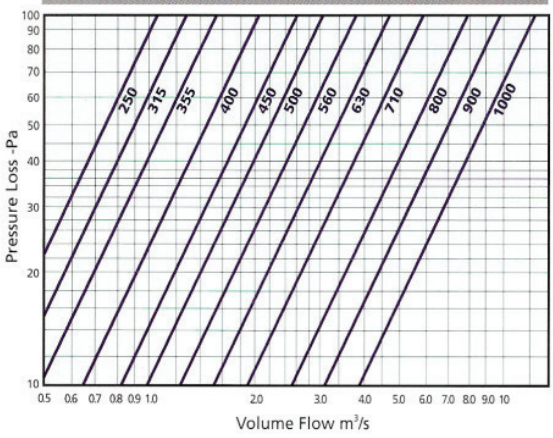
An extensive range of matching flanges, mounting feet/plates, flexible connectors, anti-vibration mounts are available to complement the attenuators.
Please contact Stuart Acoustics for further details.

Alternative product specifications

The above specification refers to our standard, stock range. We can also supply custom made C series attenuators with alternative dimensions, flange specification, temperature ratings, construction materials and product finishes. Please contact our Technical Department for further information.

AIRFLOW PRESSURE LOSS FOR C SERIES PODDED UNITS, 1 X DIA LENGTHS (SUFFIX 1)

For 2 x dia lengths (suffix 2) multiply these values x 1.5



C SERIES STANDARD UNITS, INSERTION LOSS PERFORMANCE DATA

EXCLUDING POD KIT – CENTRE BAND FREQUENCY								INCLUDING FITTED POD KIT – CENTRE BAND FREQUENCY								C SERIES EXCLUDING POD
63	125	250	500	1000	2000	4000	8000	63	125	250	500	1000	2000	4000	8000	
1	2	2	8	10	8	8	7	2	6	8	13	21	24	22	18	1100-C*1-0250
1	3	4	13	18	12	12	10	3	12	13	23	29	29	19	20	1100-C*2-0250
1	2	4	9	11	10	9	7	2	7	8	14	22	25	22	19	1100-C*1-0315
2	2	5	13	18	12	11	10	3	13	14	23	30	30	20	25	1100-C*2-0315
2	3	5	11	13	11	10	8	2	6	8	11	22	24	21	16	1100-C*1-0355
3	4	7	14	18	15	11	10	3	10	15	22	29	30	29	22	1100-C*2-0355
2	3	5	10	13	11	9	8	2	7	9	15	23	25	21	17	1100-C*1-0400
3	4	8	14	18	14	11	9	3	10	14	24	30	29	28	21	1100-C*2-0400
2	3	6	12	13	11	9	7	2	6	8	16	23	23	21	16	1100-C*1-0450
3	4	8	17	18	15	11	10	3	7	12	22	29	29	25	20	1100-C*2-0450
2	3	6	14	14	12	10	5	2	7	9	17	24	24	20	16	1100-C*1-0500
3	7	8	19	20	17	14	11	4	10	16	26	29	29	29	20	1100-C*2-0500
2	4	7	14	14	9	9	7	3	7	9	18	24	24	20	15	1100-C*1-0560
3	6	10	19	20	14	12	10	4	9	17	27	29	28	23	23	1100-C*2-0560
2	5	7	15	13	9	9	8	3	5	9	18	25	22	18	13	1100-C*1-0630
4	7	13	21	21	14	13	12	5	9	18	28	30	29	24	19	1100-C*2-0630
3	5	9	15	14	10	9	8	3	5	10	19	25	22	18	14	1100-C*1-0710
4	9	16	22	23	17	13	9	5	9	17	28	29	30	26	20	1100-C*2-0710
3	5	9	16	14	10	8	8	4	5	10	15	25	22	19	14	1100-C*1-0800
4	6	10	21	23	17	12	10	5	8	18	29	30	29	27	19	1100-C*2-0800
3	5	10	17	15	11	9	8	5	6	11	21	23	22	17	13	1100-C*1-0900
4	6	13	22	21	14	12	11	5	11	18	29	30	26	19	16	1100-C*2-0900
4	6	11	17	15	11	9	8	5	6	13	22	25	21	17	14	1100-C*1-1000
5	10	16	23	23	16	13	11	5	10	19	29	30	27	22	18	1100-C*2-1000

The figures shown are derived from Stuart Acoustics ongoing test programme in accordance with BS 4718:1971 static test procedures which are considered more reliable than dynamic tests which can be affected by external variables. Please note that 63Hz figures are for guidance only as they are not covered by the BS4718 test procedure.