



UNIT 3, 3 STATION ROAD, HAYLING ISLAND,
PO11 0EA

ENVIRONMENTAL STATEMENT

Project description

INSTALLATION OF EXTRACTOR FLUE & FRONT ENTRANCE ALTERATIONS

Prepared by
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STATEMENT

This statement has prepared to support planning application for Unit3, 3 Station Road, Hayling Island, PO11 0EA.

Proposed Extractor Details

On the extraction system we will be using 3m canopy with grease filter. From canopy to roof level, proposed flue will be 400mm x 400mm square stainless steel and welded flue will be extended to roof level. On the flue we will install below specified units internally to meet environmental requirements;

- For the odour control we will use a carbon filter system,
- The duct work that will be fitted outside will 1m above the roof level and will be used Jet Cowl Galvanised ducting head to allow the air to directly flow upwards

- 1- 3m canopy with grease filter by New Ozdemir Metal Works
- 2- Heavy duty Carbon Filter by Airclean
- 3- Attenuators by Acoustica CP03 – CA – 400
- 4- Extract fan by Helios Gigabox centrifugal fan 560
- 5- Ductwork by New Ozdemir Metal Works,

Please find required specification for above items in appendix 1.



APPENDIX 1

AIRCLEAN

YOUR AIR FILTER MANUFACTURER

**P.O. BOX 147,
MAIDSTONE, ME14 2LA.**

**TEL:01622 832777
FAX:01622 832507**

sales@airclean.co.uk www.airclean.co.uk

Metal Cased Discarbs

The metal cased 'Discarb' cells have the highest carbon loading in our range, and have standard or heavy-duty carbon panels permanently sealed into a galvanised sheet steel casing. This construction gives a very strong unit capable of handling large air volumes or where conditions dictate, increased contact time. The advantage of this unit is that with panels sealed in, there is no possibility of air leakage. Also, these units can be manufactured to almost any reasonable size, the limiting factors being the overall weight for handling purposes and the size of individual panels. When the unit has finished its useful life it is discarded and replaced with a complete new cell.



Standard Duty Cells							
Nominal Size	Actual Size mm	Number of	Carb.	Discarb	Airflow		Pressure
W x H x L	W x H x L	Panels	Weight	Weight	m ³ /s	cfm	Pa
12" x 12" x 12"	292 x 292 x 292	6	5 kg	9 kg	0.10	212	75
12" x 12" x 18"	292 x 292 x 445	6	8 kg	14 kg	0.15	318	95
12" x 12" x 24"	292 x 292 x 597	6	10 kg	18 kg	0.22	466	140
18" x 18" x 12"	445 x 445 x 292	8	10 kg	17 kg	0.21	445	55
18" x 18" x 18"	445 x 445 x 445	8	15 kg	25 kg	0.31	657	70
18" x 18" x 24"	445 x 445 x 597	8	21 kg	33 kg	0.41	868	105
24" x 24" x 12"	597 x 597 x 292	12	20 kg	31 kg	0.41	868	70
24" x 24" x 18"	597 x 597 x 445	12	31 kg	45 kg	0.61	1292	90
24" x 24" x 24"	597 x 597 x 597	12	42 kg	59 kg	0.81	1716	130
12" x 24" x 24"	298 x 597 x 597	6	21 kg	35 kg	0.40	847	130

Extra Duty Cells							
Nominal Size	Actual Size	No. of	Carb.	Discarb	Airflow		Pressure
W x H x L	W x H x L	Panels	weight	weight	m ³ /s	cfm	Pa
12" x 12" x 12"	292 x 292 x 292	6	6 kg	10 kg	0.13	275	125
12" x 12" x 18"	292 x 292 x 445	6	9 kg	15 kg	0.20	424	175
12" x 12" x 24"	292 x 292 x 597	6	12 kg	20 kg	0.27	572	250
18" x 18" x 12"	445 x 445 x 292	8	12 kg	19 kg	0.30	635	95
18" x 18" x 18"	445 x 445 x 445	8	19 kg	28 kg	0.41	868	125
18" x 18" x 24"	445 x 445 x 597	8	25 kg	37 kg	0.54	1144	185
24" x 24" x 12"	597 x 597 x 292	12	25 kg	35 kg	0.54	1144	125
24" x 24" x 18"	597 x 597 x 445	12	38 kg	52 kg	0.80	1694	150
24" x 24" x 24"	597 x 597 x 597	12	51 kg	68 kg	1.06	2245	225
12" x 24" x 24"	298 x 597 x 597	6	26 kg	46 kg	0.53	1122	225

The company reserves the right to change the specifications without notice. E & OE.

Code AC6/2a Ref 02/09

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Technical

The capacities shown are based on a dwell time of 0.1 seconds .

For contact times of 0.3 seconds, reduce rated airflow to 1/3rd, pressure drop will also reduce to 1/3rd.

Max Temperature 40 Deg C

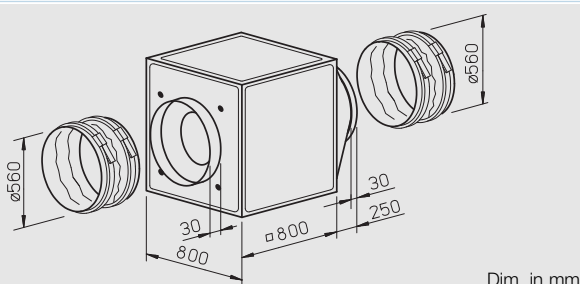
Max Humidity 80% RH

Non-standard sizes

Other sizes are available to suit individual requirements. Our Technical Department will be pleased to

Models GB..

Arbitrary installation position and flexible assembly by five possible discharge directions.



■ **Special features of type GB.. T120**

- Designed for moving dirty, humid and hot air volumes up to max. 120° C.
- Motor located outside of air flow.
- Temperature insulated partition panel between motor and impeller, lined with 20 mm thick, flame-retardant mineral wool.
- Easily accessible motor and impeller unit, removable without disassembling the system components.
- Inspection cover with handle, simply remove for cleaning and maintenance.
- Condensate collector with condensate spigot included in delivery. Drill hole for rain drainage (accessories) for outdoor installation is prepared.

□ **Assembly of types GB.. T120**

Installation must be carried out with condensation discharge showing downward. Flexible assembly by three possible centrifugal discharge directions via the discharge adapter. Outdoor installation is possible using outdoor cover hood and external weather louvers (accessories).

■ **Feature**

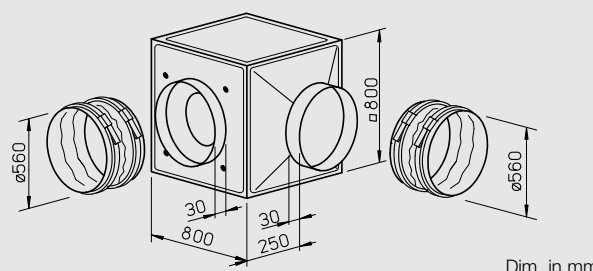
□ **Assembly of types GB..**

Arbitrary installation position and flexible assembly by five possible discharge directions via the discharge adapter. For wall mounting the wall bracket (accessories) has to be used. Outdoor installation is possible using outdoor cover hood and external weather louvers (accessories).

Models GB.. T120

NEW!

Designed for moving dirty, humid and hot air up to max. 120° C.



■ **Specification of both types**

□ **Casing**

Self-supporting frame construction from aluminium hollow profiles. Double-walled side panels from galvanised sheet steel, lined with 20 mm thick temperature insulating and flame-retardant mineral wool. Intake cone for ideal inflow as well as spigot and flexible sleeve (for the respective max. permissible air flow temperature) for duct connection. With discharge adapter (from square to circular) on the pressure side for low-loss discharge and flexible sleeve to reduce vibration transmission. Simple positioning by standard crane hooks.

□ **Impeller**

Smooth running backward curved aluminium centrifugal impeller highly efficient and direct driven. Energy efficient with a low noise development. Dynamically balanced together with the motor to DIN ISO 1940 Pt.1 – class 6.3.

□ **Motor**

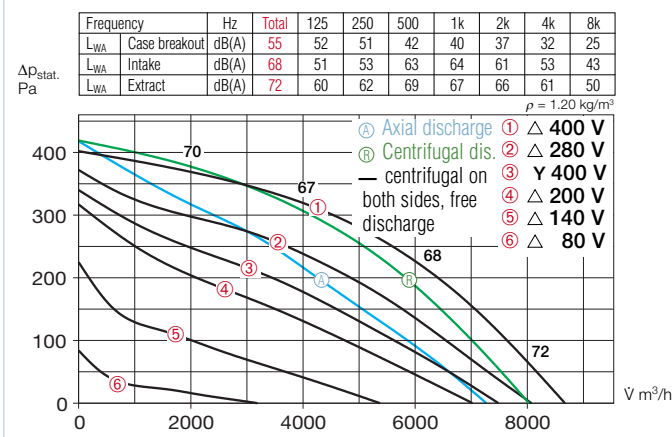
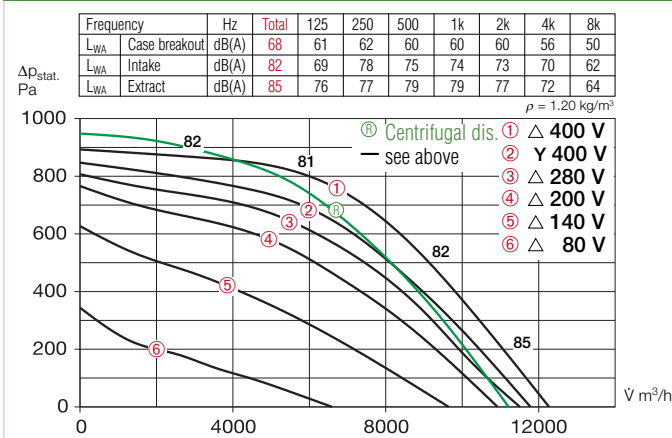
Maintenance-free external rotor motor or IEC-standard motor protected to IP 44 or 54. With ball bearings and radio suppressed as standard.

□ **Electrical connection**

Standard terminal box (IP 54) fitted on the motor; with GB.. T120 fitted on the motor support plate.

Type	Ref. No.	Air flow volume (FID)	R.P.M.	Sound press. level case breakout	Motor power (nominal)	Current full load	Current speed controlled	Wiring diagram	Maximum air flow temperature full load	Nominal weight (net)	5 step transformer controller with motor protect. unit without motor protect. unit				Full motor protection unit using the thermal contacts		
		l m³/h	min ⁻¹	dB(A) at 4 m	kW	A	A	Nr.	+°C	+°C	kg	Type	Ref. No.	Type	Ref. No.	Type	Ref. No.
2 speed motor, 3 Phase motor, 400 V / 3 ph. / 50 Hz, Y/Δ-wiring, protection to IP 54																	
GBD 560/6/6	5522	7800/8640	690/870	35	0.51/0.80	0.90/1.90	1.90	867	60	60	80	RDS 4	1316	TSD 3.0	1502	M4 ¹⁾	1571
GBD 560/4/4	5521	11500/12590	1110/1350	44	1.70/2.50	2.80/4.80	4.90	867	55	45	90	RDS 7	1578	TSD 7.0	1504	M4 ¹⁾	1571
2 speed motor, 3 Phase motor, 400 V / 3 ph. / 50 Hz, Y/Δ-wiring, protection to IP 54																	
GBD 560/4/4 T120	5778	11520/12300	1250/1400	48	1.85/2.50	3.20/6.80	6.80	520	120	120	105	RDS 7	1578	TSD 7.0	1504	M4 ¹⁾	1571

¹⁾ incl. operation and 2 speed switch

GBD 560/6/6

GBD 560/4/4 T120

Motor protection

Motors have thermal contacts wired to the terminal block and must be connected to a motor protection unit.

Speed control

All types are speed controllable by voltage reduction using a transformer controller. The 3-phase models can also be 2 speed controlled by star/delta switch (accessories DS 2 or full motor protection unit M 4). The duties at different speeds are given in the performance curve.

Sound levels

Total sound power levels and the spectrum figures in dB(A) are given for:
 — sound level case breakout
 — sound level intake
 — sound level extract in the tables above the performance curve. Beside, the sound power level (on intake) is stated over the rated characteristic curve. In the table below you can also find the
 — case breakout level at 4 m (freefield conditions).

Accessories of both types

Anti vibration mounts for installation indoors. Set of 4.

SDD-U Ref. No. 5627

Wall bracket for wall mounting.

GB-WK 560 Ref. No. 5626

External weather louvers to cover exhaust opening.

GB-WSG 560 Ref. No. 5640

Outdoor cover hood for outdoor installation.

GB-WSD 560 Ref. No. 5749

On/Off and 2-speed switch for 3-phase star/delta motors.

DS 2²⁾ Ref. No. 1351

²⁾ full motor protection unit recommended:
 MD Ref. No. 5849

Specific accessories

☐ for types GB..

Condensate collector with condensate spigot for pipe connection.
GB-KW 560 Ref. No. 5645
 (Condensate collector with condensate spigot included in delivery with GB.. T120).

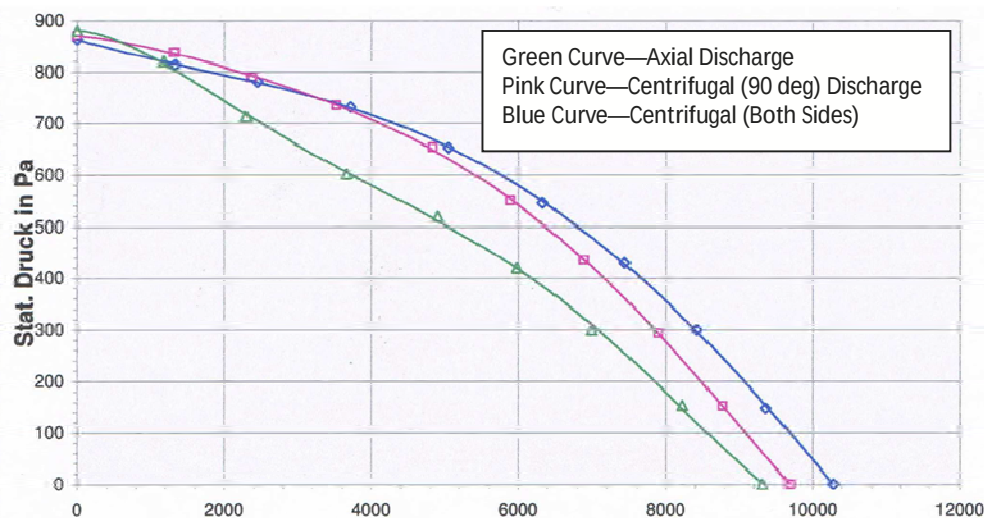
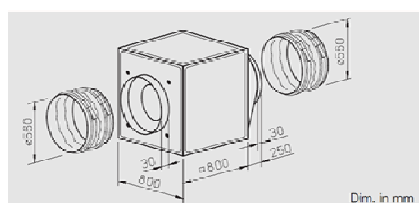
☐ for types GB.. T120

Rain drainage for outdoor installation (drill holes for rain drainage is already prepared).

GB-RA Ref. No. 9418

Information	Pages
Design of systems, acoustic	12 on
General techn. information, speed control	17 on
Accessory-Details	Pages
Speed controller and full motor protection unit	397 on

GBW 560/4


 Δp_{stat}
Pa

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L _{WA}	Case breakout	dB(A)	64	64	64	48	50	46	43	37
L _{WA}	Intake	dB(A)	77	57	66	69	74	70	64	55
L _{WA}	Extract	dB(A)	81	62	74	75	75	74	70	61

Self supporting frame construction from aluminium hollow profiles. Double-walled side panels from galvanised sheet steel. Intake cone for ideal airflow, spigot and flexible connector for duct connection. With discharge adapter (square to circular) on the pressure side for low-loss discharge and flexible sleeve to reduce vibration transmission. Simple positioning by standard crane hooks. Installation must be carried out with condensation discharge showing downward. Flexible assembly by three possible centrifugal discharge directions via discharge adapter. Outdoor installation is possible using outdoor cover hood and external weather louvres (accessories).

Impeller:

Smooth running backward curved aluminium centrifugal impeller highly efficient and direct driven. Energy efficient with a low noise development. Dynamically balanced together with the motor to DIN ISO 1940 Pt.1 - class 6.3

Motor:

Maintenance free external rotor motor or IEC standard motor protected to IP 44 and 54. With ball bearings and radio suppressed as standard.

Electrical Connection:

Standard terminal box (IP54) fitted on the motor support plate.

Motor Protection:

Motors have thermal contacts wired to the terminal block and must be connected to a motor protection unit.

Speed Control:

Speed controllable by voltage reduction using transformer controller.

Type	Ref. No.	R.P.M.	Sound Level	Motor power (nominal)	Current Full Load	Maximum air flow temp.	Nom. weight (net)	5 step trans. controller	
		min ⁻¹	dB(A) at 4 m	kW	Amps	+°C	kg	Type	Ref.
GBW 560/4	5508	1370	44	2.0	8.7	60	90	TSW 10	1498

Volume Flow m³/s against static pressure

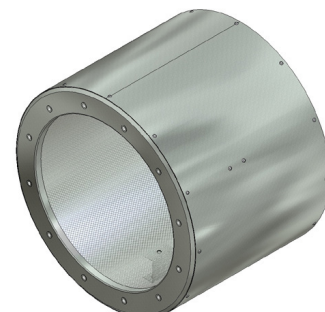
0	50	100	150	200	250	300	400	500	600	700	800
2.77	2.72	2.55	2.48	2.41	2.31	2.22	2.0	1.72	1.44	1.00	0.36

Type Ref.

CP03 - CA - 0315 Silencer

Available in two standard lengths C Series silencers have excellent attenuation properties, achieved with sound absorbing infill retained in the attenuator casing by a perforated liner. The central pod (code P) is an option to increase the insertion loss, however it will add resistance.

- Fits directly onto 315mm diameter fans
- Standard lengths 315mm (1D) & 630mm (2D)
- Use up to 70°C (standard construction)
- Systems up to 1000 Pascals
- Special lengths on request



Insertion Loss (dB) - Centre Band Frequency

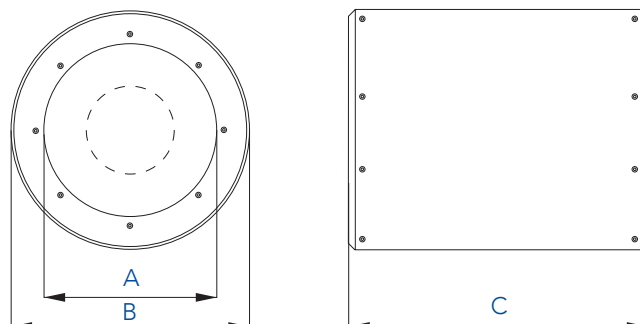
Product Code	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
CP03 - CA - 0315 - 1D	1	2	4	9	11	10	9	7
CP03 - CA - 0315 - 2D	2	2	4	9	11	10	9	7
CP03 - CAP - 0315 - 1D	2	7	8	14	22	25	22	19
CP03 - CAP - 0315 - 2D	3	13	14	23	30	30	25	20

Insertion loss data is derived from continual testing to BS4718 and other standards in independent UKAS certified laboratories, which includes where appropriate, re-generated or self noise testing in both forward and reverse flow conditions. If you request system analysis from our technicians all predictions will be assessed using the relevant certified insertion loss data together with relevant dynamic corrections.

Dimensional Data

Product Code	A (mm)	B (mm)	C (mm)	Weight (kg)
CP03 - CA - 0315 - 1D	315	416	315	9
CP03 - CA - 0315 - 2D	315	416	630	11
CP03 - CAP - 0315 - 1D	315	416	315	15
CP03 - CAP - 0315 - 2D	315	416	630	18

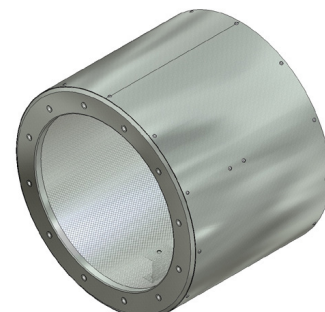
8 off M8 on 355 PCD



CP03 - CA - 0355 Silencer

Available in two standard lengths C Series silencers have excellent attenuation properties, achieved with sound absorbing infill retained in the attenuator casing by a perforated liner. The central pod (code P) is an option to increase the insertion loss, however it will add resistance.

- Fits directly onto 355mm diameter fans
- Standard lengths 355mm (1D) & 710mm (2D)
- Use up to 70°C (standard construction)
- Systems up to 1000 Pascals
- Special lengths on request



Insertion Loss (dB) - Centre Band Frequency

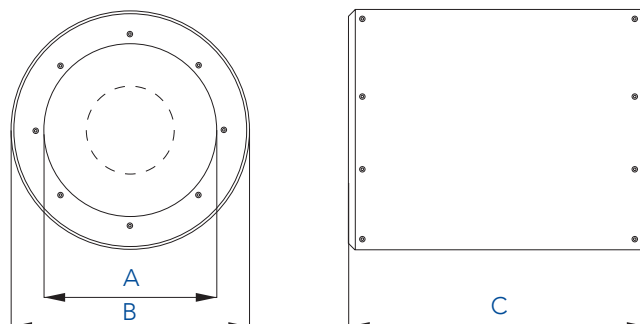
Product Code	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
CP03 - CA - 0355 - 1D	2	3	5	11	13	11	10	8
CP03 - CA - 0355 - 2D	3	4	7	14	18	15	11	10
CP03 - CAP - 0355 - 1D	2	6	8	11	22	24	21	16
CP03 - CAP - 0355 - 2D	3	10	15	22	29	30	29	22

Insertion loss data is derived from continual testing to BS4718 and other standards in independent UKAS certified laboratories, which includes where appropriate, re-generated or self noise testing in both forward and reverse flow conditions. If you request system analysis from our technicians all predictions will be assessed using the relevant certified insertion loss data together with relevant dynamic corrections.

Dimensional Data

Product Code	A (mm)	B (mm)	C (mm)	Weight (kg)
CP03 - CA - 0355 - 1D	355	460	355	11
CP03 - CA - 0355 - 2D	355	460	710	18
CP03 - CAP - 0355 - 1D	355	460	355	13
CP03 - CAP - 0355 - 2D	355	460	710	22

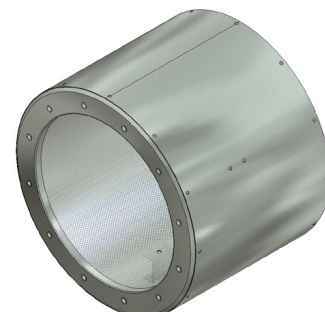
8 off M8 on 395 PCD



CP03 - CA - 0400 Silencer

Available in two standard lengths C Series silencers have excellent attenuation properties, achieved with sound absorbing infill retained in the attenuator casing by a perforated liner. The central pod (code P) is an option to increase the insertion loss, however it will add resistance.

- Fits directly onto 400mm diameter fans
- Standard lengths 400mm (1D) & 800mm (2D)
- Use up to 70°C (standard construction)
- Systems up to 1000 Pascals
- Special lengths on request



Insertion Loss (dB) - Centre Band Frequency

Product Code	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
CP03 - C* - 0400 - 1D	2	3	5	10	13	11	9	8
CP03 - C* - 0400 - 2D	3	4	8	14	18	14	11	9
CP03 - C*P - 0400 - 1D	2	7	9	15	23	25	21	17
CP03 - C*P - 0400 - 2D	3	10	14	24	30	29	28	21

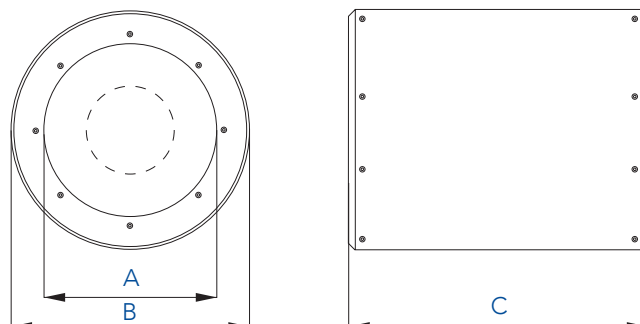
Replace * in code with A or B for connection pattern. Insertion loss data is derived from continual testing to BS4718 and other standards in independent UKAS certified laboratories, which includes where appropriate, re-generated or self noise testing in both forward and reverse flow conditions. If you request system analysis from our technicians all predictions will be assessed using the relevant certified insertion loss data together with relevant dynamic corrections.

Dimensional Data

Product Code	A (mm)	B (mm)	C (mm)	Weight (kg)
CP03 - CA - 0400 - 1D	400	503	400	9
CP03 - CA - 0400 - 2D	400	503	800	11
CP03 - CAP - 0400 - 1D	400	503	400	15
CP03 - CAP - 0400 - 2D	400	503	800	18

Pattern A
8 x M10 - 450 PCD

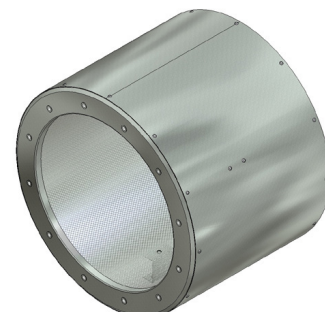
Pattern B
12 - M8 - 438 PCD



CP03 - CA - 0450 Silencer

Available in two standard lengths C Series silencers have excellent attenuation properties, achieved with sound absorbing infill retained in the attenuator casing by a perforated liner. The central pod (code P) is an option to increase the insertion loss, however it will add resistance.

- Fits directly onto 450mm diameter fans
- Standard lengths 450mm (1D) & 900mm (2D)
- Use up to 70°C (standard construction)
- Systems up to 1000 Pascals
- Special lengths on request



Insertion Loss (dB) - Centre Band Frequency

Product Code	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
CP03 - C* - 0450 - 1D	2	3	6	12	13	11	9	7
CP03 - C* - 0450 - 2D	3	4	8	17	18	15	11	10
CP03 - C*P - 0450 - 1D	2	6	8	16	23	23	21	16
CP03 - C*P - 0450 - 2D	3	7	12	22	29	29	25	20

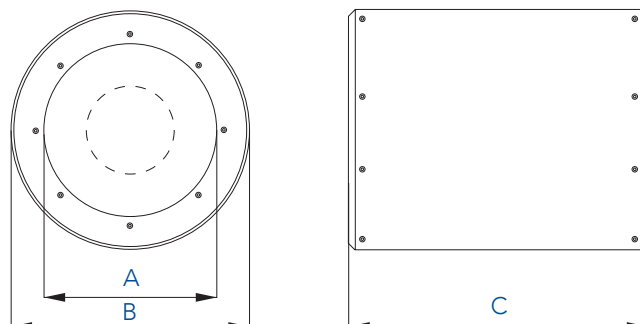
Replace * in code with A or B for connection pattern. Insertion loss data is derived from continual testing to BS4718 and other standards in independent UKAS certified laboratories, which includes where appropriate, re-generated or self noise testing in both forward and reverse flow conditions. If you request system analysis from our technicians all predictions will be assessed using the relevant certified insertion loss data together with relevant dynamic corrections.

Dimensional Data

Product Code	A (mm)	B (mm)	C (mm)	Weight (kg)
CP03 - CA - 0450 - 1D	450	590	450	15
CP03 - CA - 0450 - 2D	450	590	900	27
CP03 - CAP - 0450 - 1D	450	590	450	18
CP03 - CAP - 0450 - 2D	450	590	900	32

Pattern A
8 x M10 - 500 PCD

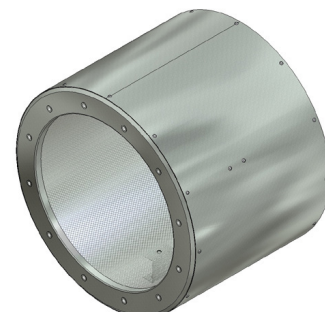
Pattern B
12 - M8 - 487 PCD



CP03 - CA - 0500 Silencer

Available in two standard lengths C Series silencers have excellent attenuation properties, achieved with sound absorbing infill retained in the attenuator casing by a perforated liner. The central pod (code P) is an option to increase the insertion loss, however it will add resistance.

- Fits directly onto 500mm diameter fans
- Standard lengths 500mm (1D) & 1000mm (2D)
- Use up to 70°C (standard construction)
- Systems up to 1000 Pascals
- Special lengths on request



Insertion Loss (dB) - Centre Band Frequency

Product Code	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
CP03 - C* - 0500 - 1D	2	3	6	14	14	12	10	5
CP03 - C* - 0500 - 2D	3	7	8	19	20	17	14	11
CP03 - C*P - 0500 - 1D	2	7	9	17	24	24	20	16
CP03 - C*P - 0500 - 2D	4	10	16	26	29	29	29	20

Replace * in code with A or B for connection pattern. Insertion loss data is derived from continual testing to BS4718 and other standards in independent UKAS certified laboratories, which includes where appropriate, re-generated or self noise testing in both forward and reverse flow conditions. If you request system analysis from our technicians all predictions will be assessed using the relevant certified insertion loss data together with relevant dynamic corrections.

Dimensional Data

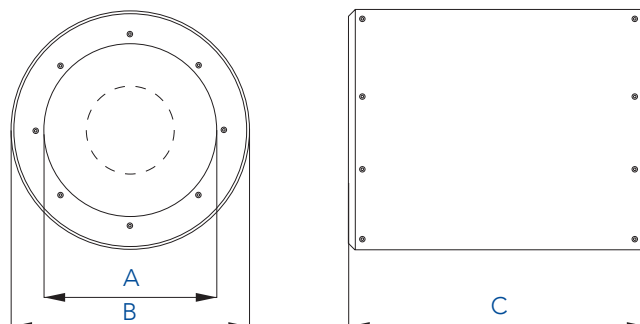
Product Code	A (mm)	B (mm)	C (mm)	Weight (kg)
CP03 - CA - 0500 - 1D	500	650	500	18
CP03 - CA - 0500 - 2D	500	650	1000	32
CP03 - CAP - 0500 - 1D	500	650	500	22
CP03 - CAP - 0500 - 2D	500	650	1000	37

Pattern A

12 x M10 - 560 PCD

Pattern B

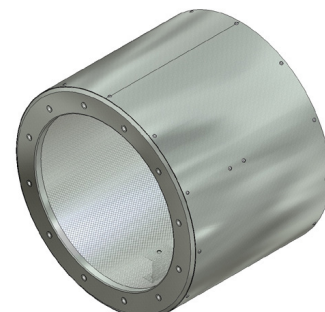
12 - M8 - 541 PCD



CP03 - CA - 0560 Silencer

Available in two standard lengths C Series silencers have excellent attenuation properties, achieved with sound absorbing infill retained in the attenuator casing by a perforated liner. The central pod (code P) is an option to increase the insertion loss, however it will add resistance.

- Fits directly onto 560mm diameter fans
- Standard lengths 560mm (1D) & 1120mm (2D)
- Use up to 70°C (standard construction)
- Systems up to 1000 Pascals
- Special lengths on request



Insertion Loss (dB) - Centre Band Frequency

Product Code	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
CP03 - C* - 0560 - 1D	2	4	7	14	14	9	9	7
CP03 - C* - 0560 - 2D	3	6	10	19	20	14	12	10
CP03 - C*P - 0560 - 1D	3	7	9	18	24	24	20	15
CP03 - C*P - 0560 - 2D	4	9	17	27	29	28	23	23

Replace * in code with A or B for connection pattern. Insertion loss data is derived from continual testing to BS4718 and other standards in independent UKAS certified laboratories, which includes where appropriate, re-generated or self noise testing in both forward and reverse flow conditions. If you request system analysis from our technicians all predictions will be assessed using the relevant certified insertion loss data together with relevant dynamic corrections.

Dimensional Data

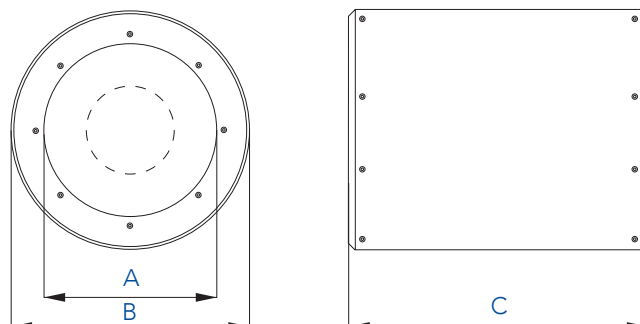
Product Code	A (mm)	B (mm)	C (mm)	Weight (kg)
CP03 - CA - 0560 - 1D	560	712	560	22
CP03 - CA - 0560 - 2D	560	712	1120	48
CP03 - CAP - 0560 - 1D	560	712	560	26
CP03 - CAP - 0560 - 2D	560	712	1120	57

Pattern A

12 x M10 - 620 PCD

Pattern B

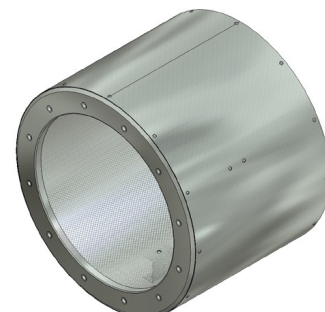
16- M8 - 605 PCD



CP03 - CA - 0630 Silencer

Available in two standard lengths C Series silencers have excellent attenuation properties, achieved with sound absorbing infill retained in the attenuator casing by a perforated liner. The central pod (code P) is an option to increase the insertion loss, however it will add resistance.

- Fits directly onto 630mm diameter fans
- Standard lengths 630mm (1D) & 1260mm (2D)
- Use up to 70°C (standard construction)
- Systems up to 1000 Pascals
- Special lengths on request



Insertion Loss (dB) - Centre Band Frequency

Product Code	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
CP03 - C* - 0630 - 1D	2	5	7	15	13	9	9	7
CP03 - C* - 0630 - 2D	2	5	9	18	25	22	18	13
CP03 - C*P - 0630 - 1D	4	7	13	21	21	14	13	12
CP03 - C*P - 0630 - 2D	5	9	18	28	30	29	24	19

Replace * in code with A or B for connection pattern. Insertion loss data is derived from continual testing to BS4718 and other standards in independent UKAS certified laboratories, which includes where appropriate, re-generated or self noise testing in both forward and reverse flow conditions. If you request system analysis from our technicians all predictions will be assessed using the relevant certified insertion loss data together with relevant dynamic corrections.

Dimensional Data

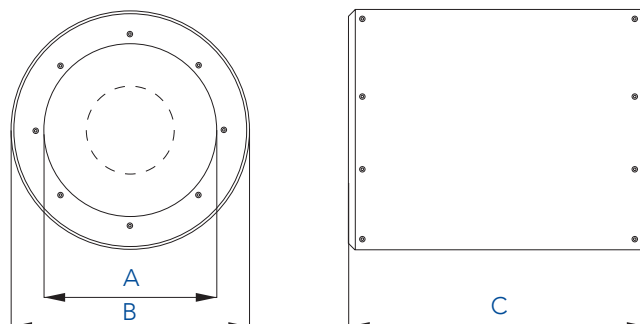
Product Code	A (mm)	B (mm)	C (mm)	Weight (kg)
CP03 - CA - 0630 - 1D	630	780	630	26
CP03 - CA - 0630 - 2D	630	780	1260	48
CP03 - CAP - 0630 - 1D	630	780	630	32
CP03 - CAP - 0630 - 2D	630	780	1260	57

Pattern A

12 x M10 - 690 PCD

Pattern B

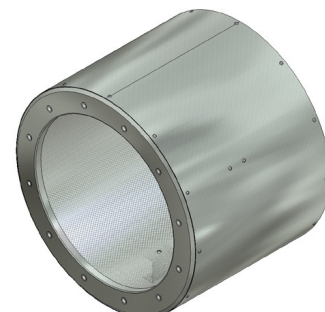
16 - M8 - 674 PCD



CP03 - CA - 0710 Silencer

Available in two standard lengths C Series silencers have excellent attenuation properties, achieved with sound absorbing infill retained in the attenuator casing by a perforated liner. The central pod (code P) is an option to increase the insertion loss, however it will add resistance.

- Fits directly onto 710mm diameter fans
- Standard lengths 710mm (1D) & 1420mm (2D)
- Use up to 70°C (standard construction)
- Systems up to 1000 Pascals
- Special lengths on request



Insertion Loss (dB) - Centre Band Frequency

Product Code	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
CP03 - C* - 0710 - 1D	3	5	9	15	14	10	9	8
CP03 - C* - 0710 - 2D	4	9	16	22	23	17	13	9
CP03 - C*P - 0710 - 1D	3	5	10	19	25	22	18	14
CP03 - C*P - 0710 - 2D	5	9	17	28	29	30	26	20

Replace * in code with A or B for connection pattern. Insertion loss data is derived from continual testing to BS4718 and other standards in independent UKAS certified laboratories, which includes where appropriate, re-generated or self noise testing in both forward and reverse flow conditions. If you request system analysis from our technicians all predictions will be assessed using the relevant certified insertion loss data together with relevant dynamic corrections.

Dimensional Data

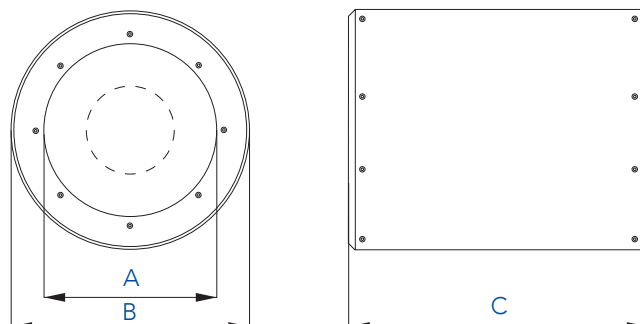
Product Code	A (mm)	B (mm)	C (mm)	Weight (kg)
CP03 - CA - 0710 - 1D	710	865	710	32
CP03 - CA - 0710 - 2D	710	865	1420	59
CP03 - CAP - 0710 - 1D	710	865	710	39
CP03 - CAP - 0710 - 2D	710	865	1420	71

Pattern A

16 x M10 - 770 PCD

Pattern B

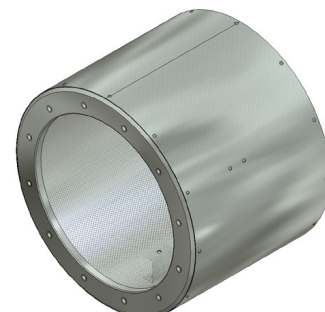
16 - M10 - 751 PCD



CP03 - CA - 0800 Silencer

Available in two standard lengths C Series silencers have excellent attenuation properties, achieved with sound absorbing infill retained in the attenuator casing by a perforated liner. The central pod (code P) is an option to increase the insertion loss, however it will add resistance.

- Fits directly onto 800mm diameter fans
- Standard lengths 800mm (1D) & 1600mm (2D)
- Use up to 70°C (standard construction)
- Systems up to 1000 Pascals
- Special lengths on request



Insertion Loss (dB) - Centre Band Frequency

Product Code	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
CP03 - C* - 0800 - 1D	3	5	9	16	14	10	8	8
CP03 - C* - 0800 - 2D	4	6	10	21	23	17	12	10
CP03 - C*P - 0800 - 1D	4	5	10	15	25	22	19	14
CP03 - C*P - 0800 - 2D	5	8	18	29	30	29	27	19

Replace * in code with A or B for connection pattern. Insertion loss data is derived from continual testing to BS4718 and other standards in independent UKAS certified laboratories, which includes where appropriate, re-generated or self noise testing in both forward and reverse flow conditions. If you request system analysis from our technicians all predictions will be assessed using the relevant certified insertion loss data together with relevant dynamic corrections.

Dimensional Data

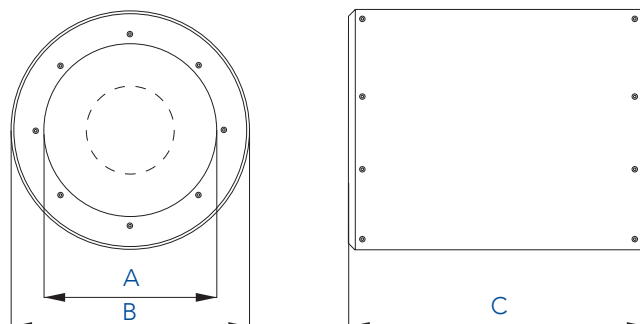
Product Code	A (mm)	B (mm)	C (mm)	Weight (kg)
CP03 - CA - 0800 - 1D	800	955	800	40
CP03 - CA - 0800 - 2D	800	955	1600	74
CP03 - CAP - 0800 - 1D	800	955	800	49
CP03 - CAP - 0800 - 2D	800	955	1600	90

Pattern A

16 x M10 - 860 PCD

Pattern B

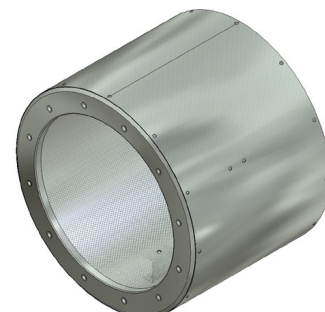
16 - M10 - 751 PCD



CP03 - CA - 0900 Silencer

Available in two standard lengths C Series silencers have excellent attenuation properties, achieved with sound absorbing infill retained in the attenuator casing by a perforated liner. The central pod (code P) is an option to increase the insertion loss, however it will add resistance.

- Fits directly onto 900mm diameter fans
- Standard lengths 900mm (1D) & 1800mm (2D)
- Use up to 70°C (standard construction)
- Systems up to 1000 Pascals
- Special lengths on request



Insertion Loss (dB) - Centre Band Frequency

Product Code	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
CP03 - C* - 0900 - 1D	3	5	10	17	15	11	9	8
CP03 - C* - 0900 - 2D	4	6	13	22	21	14	12	11
CP03 - C*P - 0900 - 1D	5	6	11	21	23	22	17	13
CP03 - C*P - 0900 - 2D	5	11	18	29	30	26	19	16

Replace * in code with A or B for connection pattern. Insertion loss data is derived from continual testing to BS4718 and other standards in independent UKAS certified laboratories, which includes where appropriate, re-generated or self noise testing in both forward and reverse flow conditions. If you request system analysis from our technicians all predictions will be assessed using the relevant certified insertion loss data together with relevant dynamic corrections.

Dimensional Data

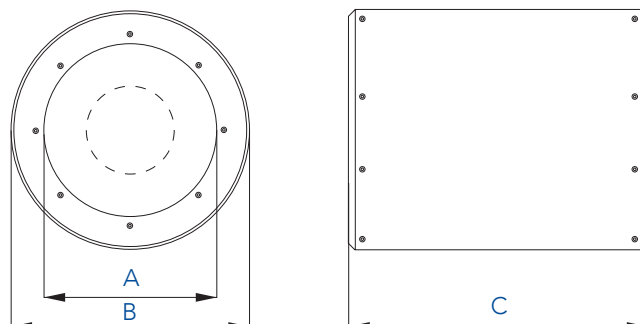
Product Code	A (mm)	B (mm)	C (mm)	Weight (kg)
CP03 - CA - 0900 - 1D	900	1105	900	55
CP03 - CA - 0900 - 2D	900	1105	1800	102
CP03 - CAP - 0900 - 1D	900	1105	900	67
CP03 - CAP - 0900 - 2D	900	1105	1800	102

Pattern A

16 x M12 - 970 PCD

Pattern B

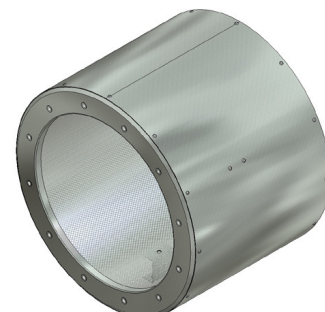
24 - M10 - 934 PCD



CP03 - CA - 1000 Silencer

Available in two standard lengths C Series silencers have excellent attenuation properties, achieved with sound absorbing infill retained in the attenuator casing by a perforated liner. The central pod (code P) is an option to increase the insertion loss, however it will add resistance.

- Fits directly onto 1000mm diameter fans
- Standard lengths 1000mm (1D) & 2000mm (2D)
- Use up to 70°C (standard construction)
- Systems up to 1000 Pascals
- Special lengths on request



Insertion Loss (dB) - Centre Band Frequency

Product Code	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
CP03 - C* - 1000 - 1D	4	6	11	17	15	11	9	8
CP03 - C* - 1000 - 2D	5	10	16	23	25	16	13	11
CP03 - C*P - 1000 - 1D	5	6	13	22	25	21	17	14
CP03 - C*P - 1000 - 2D	5	10	19	29	30	27	22	18

Replace * in code with A or B for connection pattern. Insertion loss data is derived from continual testing to BS4718 and other standards in independent UKAS certified laboratories, which includes where appropriate, re-generated or self noise testing in both forward and reverse flow conditions. If you request system analysis from our technicians all predictions will be assessed using the relevant certified insertion loss data together with relevant dynamic corrections.

Dimensional Data

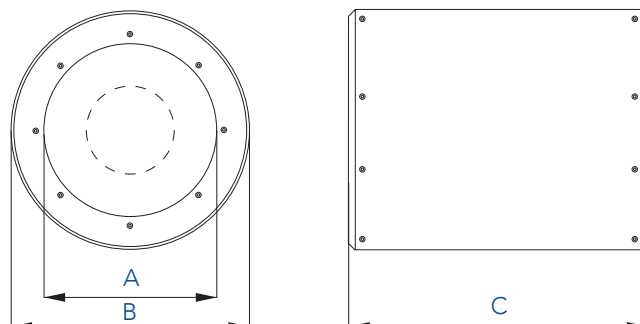
Product Code	A (mm)	B (mm)	C (mm)	Weight (kg)
CP03 - CA - 1000 - 1D	1000	1186	1000	66
CP03 - CA - 1000 - 2D	1000	1186	2000	124
CP03 - CAP - 1000 - 1D	1000	1186	1000	82
CP03 - CAP - 1000 - 2D	1000	1186	2000	151

Pattern A

16 x M12 - 1070 PCD

Pattern B

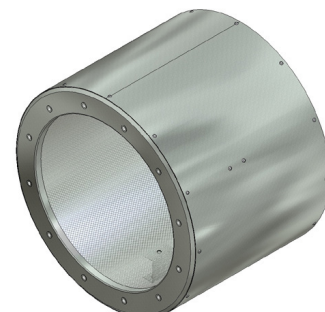
24 - M10 - 1043 PCD



CP03 - CA - 1120 Silencer

Available in two standard lengths C Series silencers have excellent attenuation properties, achieved with sound absorbing infill retained in the attenuator casing by a perforated liner. The central pod (code P) is an option to increase the insertion loss, however it will add resistance.

- Fits directly onto 1120mm diameter fans
- Standard lengths 1120mm (1D) & 2240mm (2D)
- Use up to 70°C (standard construction)
- Systems up to 1000 Pascals
- Special lengths on request



Insertion Loss (dB) - Centre Band Frequency

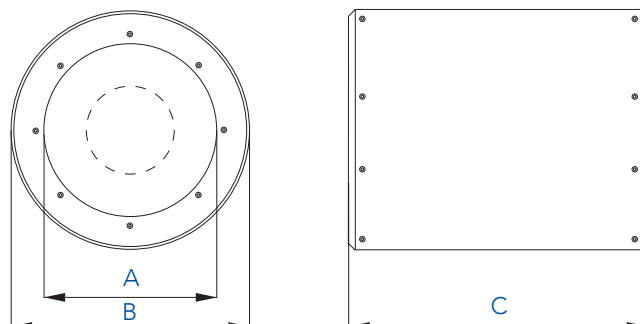
Product Code	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
CP03 - C* - 1120 - 1D	3	4	9	14	12	8	7	7
CP03 - C* - 1120 - 2D	6	8	14	22	20	13	12	10
CP03 - C*P - 1120 - 1D	4	6	11	22	20	13	12	10
CP03 - C*P - 1120 - 2D	8	11	19	30	32	30	24	17

Replace * in code with A or B for connection pattern. Insertion loss data is derived from continual testing to BS4718 and other standards in independent UKAS certified laboratories, which includes where appropriate, re-generated or self noise testing in both forward and reverse flow conditions. If you request system analysis from our technicians all predictions will be assessed using the relevant certified insertion loss data together with relevant dynamic corrections.

Dimensional Data

Product Code	A (mm)	B (mm)	C (mm)	Weight (kg)
CP03 - CA - 1120 - 1D	1120	1325	1120	137
CP03 - CA - 1120 - 2D	1120	1325	2240	192
CP03 - CAP - 1120 - 1D	1120	1325	1120	173
CP03 - CAP - 1120 - 2D	1120	1325	2240	256

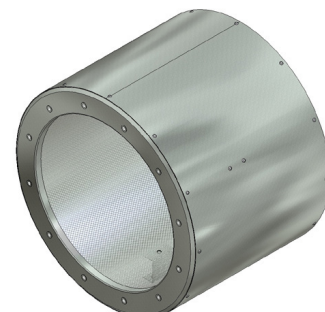
20 x M12 - 1190 PCD



CP03 - CA - 1250 Silencer

Available in two standard lengths C Series silencers have excellent attenuation properties, achieved with sound absorbing infill retained in the attenuator casing by a perforated liner. The central pod (code P) is an option to increase the insertion loss, however it will add resistance.

- Fits directly onto 1250mm diameter fans
- Standard lengths 1250mm (1D) & 2500mm (2D)
- Use up to 70°C (standard construction)
- Systems up to 1000 Pascals
- Special lengths on request



Insertion Loss (dB) - Centre Band Frequency

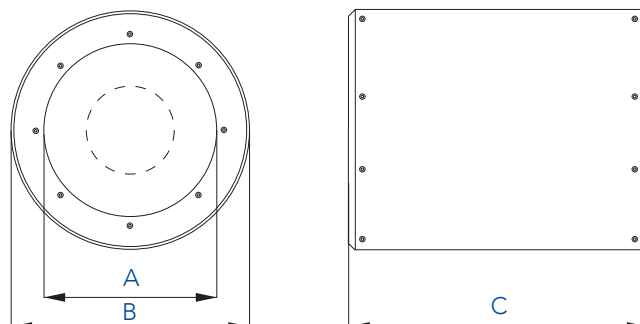
Product Code	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
CP03 - C* - 1250 - 1D	3	4	9	14	12	8	7	7
CP03 - C* - 1250 - 2D	6	8	14	22	20	13	12	11
CP03 - C*P - 1250 - 1D	4	6	11	22	21	16	14	11
CP03 - C*P - 1250 - 2D	8	11	19	30	32	30	24	17

Replace * in code with A or B for connection pattern. Insertion loss data is derived from continual testing to BS4718 and other standards in independent UKAS certified laboratories, which includes where appropriate, re-generated or self noise testing in both forward and reverse flow conditions. If you request system analysis from our technicians all predictions will be assessed using the relevant certified insertion loss data together with relevant dynamic corrections.

Dimensional Data

Product Code	A (mm)	B (mm)	C (mm)	Weight (kg)
CP03 - CA - 1250 - 1D	1250	1455	1250	169
CP03 - CA - 1250 - 2D	1250	1455	2500	259
CP03 - CAP - 1250 - 1D	1250	1455	1250	216
CP03 - CAP - 1250 - 2D	1250	1455	2500	338

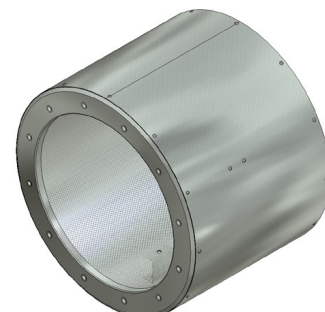
20 x M12 - 1320 PCD



CP03 - CA - 1400 Silencer

Available in two standard lengths C Series silencers have excellent attenuation properties, achieved with sound absorbing infill retained in the attenuator casing by a perforated liner. The central pod (code P) is an option to increase the insertion loss, however it will add resistance.

- Fits directly onto 1400mm diameter fans
- Standard lengths 1400mm (1D) & 2800mm (2D)
- Use up to 70°C (standard construction)
- Systems up to 1000 Pascals
- Special lengths on request



Insertion Loss (dB) - Centre Band Frequency

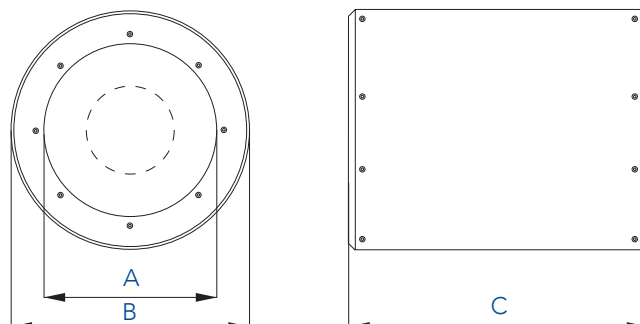
Product Code	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
CP03 - C* - 1400 - 1D	3	4	9	14	12	8	7	7
CP03 - C* - 1400 - 2D	6	8	14	22	20	13	12	11
CP03 - C*P - 1400 - 1D	4	6	11	22	21	16	14	11
CP03 - C*P - 1400 - 2D	8	11	19	30	32	30	24	17

Replace * in code with A or B for connection pattern. Insertion loss data is derived from continual testing to BS4718 and other standards in independent UKAS certified laboratories, which includes where appropriate, re-generated or self noise testing in both forward and reverse flow conditions. If you request system analysis from our technicians all predictions will be assessed using the relevant certified insertion loss data together with relevant dynamic corrections.

Dimensional Data

Product Code	A (mm)	B (mm)	C (mm)	Weight (kg)
CP03 - CA - 1400 - 1D	1400	1604	1400	220
CP03 - CA - 1400 - 2D	1400	1604	2800	397
CP03 - CAP - 1400 - 1D	1400	1604	1400	285
CP03 - CAP - 1400 - 2D	1400	1604	2800	506

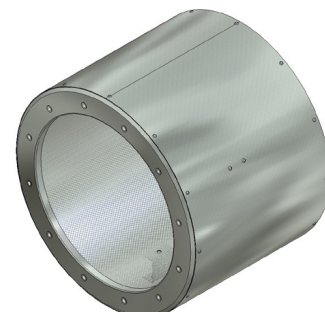
20 x M12 - 1470 PCD



CP03 - CA - 1600 Silencer

Available in two standard lengths C Series silencers have excellent attenuation properties, achieved with sound absorbing infill retained in the attenuator casing by a perforated liner. The central pod (code P) is an option to increase the insertion loss, however it will add resistance.

- Fits directly onto 1600mm diameter fans
- Standard lengths 1600mm (1D) & 3200mm (2D)
- Use up to 70°C (standard construction)
- Systems up to 1000 Pascals
- Special lengths on request



Insertion Loss (dB) - Centre Band Frequency

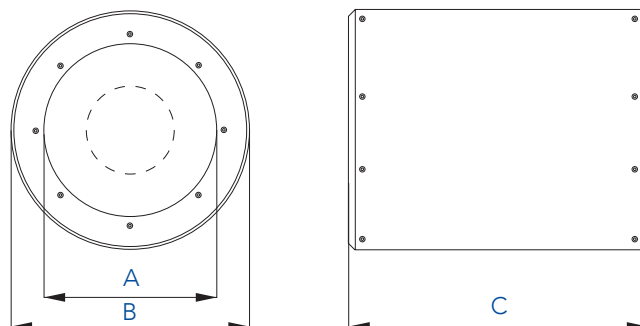
Product Code	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
CP03 - C* - 1600 - 1D	4	5	10	14	11	7	6	6
CP03 - C* - 1600 - 2D	8	9	15	20	19	12	11	9
CP03 - C*P - 1600 - 1D	5	7	12	21	20	14	12	9
CP03 - C*P - 1600 - 2D	10	14	22	28	31	29	18	15

Replace * in code with A or B for connection pattern. Insertion loss data is derived from continual testing to BS4718 and other standards in independent UKAS certified laboratories, which includes where appropriate, re-generated or self noise testing in both forward and reverse flow conditions. If you request system analysis from our technicians all predictions will be assessed using the relevant certified insertion loss data together with relevant dynamic corrections.

Dimensional Data

Product Code	A (mm)	B (mm)	C (mm)	Weight (kg)
CP03 - CA - 1600 - 1D	1600	1804	1600	220
CP03 - CA - 1600 - 2D	1600	1804	3200	397
CP03 - CAP - 1600 - 1D	1600	1804	1600	285
CP03 - CAP - 1600 - 2D	1600	1804	3200	506

24 x M12 - 1680 PCD



Material & Finish

All casings are manufactured from mill finish hot dip galvanised mild steel conforming to EN10327 (BS2989) including the flow formed one piece end fittings. To prevent erosion of absorbing materials the C Series Silencers are fitted with a perforated liner manufactured from galvanised mild steel conforming to EN10327 (BS2989). The C Series Silencers utilise acoustic grade mineral fibre absorbing infill and are manufactured to the HVCA specification DW144 class B and M&E 100 for sheet steel thickness and stiffening.

Pressure Up to 1000 Pascals positive and negative.

Temperature -12° to +70°C.

Location Internally & externally mountable.

Melinex Lining (Optional)

Where moist conditions exist (e.g. process 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 fibre migration. This will however, effect the acoustic performance of the silencer. Please contact us to discuss your requirements.

Alternative Specification

The above specification refers to our standard stock range. We can also supply custom made M Series Silencers with alternative dimensions, temperature ratings, construction materials and product finishes. Please contact us for further information and advice.

Example CP03 - CAP - 0315 - 2D. **CP03** Product group code.

CA Drilling pattern (CA for A, CB for B). **0315** Internal diameter

2D Length code (1D = 315, 2D - 630)

Cleaning & Maintenance

Should the airways require routine cleaning we recommend low-pressure air blasting, vacuuming or wiping the exposed surfaces with a damp cloth. It is not unusual for "White Zinc Oxide" to develop on galvanised silencers when the zinc in the galvanising reacts electrolytically with moisture. Silencers are of a passive nature and as such require no routine maintenance or lubrication.

Installation

For recommendations for the support of the silencer the principles of Part Six (pages 43-46) of the HVCA DW144 standard should be followed. It is important that the recommendations in the table are adhered to when locating the silencer in relation to other duct-mounted equipment. If the silencers are to be used in conjunction with equipment not listed please enquire for advice.

Equipment	Location
Centrifugal Fans	Direct couple only at the same size; use an inlet cone if open after silencer. PODDED - position 1 duct diameter from fan inlet/outlet.
Axial Fans	Direct couple only at the same size. Use an inlet cone if open after silencer. PODDED - match hub size within 30% of half nominal diameter.
Mixed Flow Fans	Direct couple only at the same size. Use an inlet cone if open after silencer.
Ductwork Bends	Direct couple only at the same size. PODDED - position two duct diameters from bend.
Ductwork Reducers	Direct couple only with reducers of maximum 15o cheek slope.
Finned Coils & Filters	Leave 200mm plenum between silencer and coil or filter, and suitable reducer as specified in HVCA DW/144 1998.

Inspection

For inspection access the recommendations set out in Heating & Ventilating Contractors Association specification DW144 1998, appendix M – Guidance Notes for Inspection, Servicing and Cleaning Access Openings, should be followed. We would suggest Level 2 one 300mm x 200mm-inspection panel downstream or Level 3 one 300mm x 200mm inspection door each side of the silencer. Refer to table 25 of DW144 or Section 2 of HVCA specification TR17 for further recommendations. It is our recommendation that the silencers are inspected periodically to ensure that the airways are free from obstructions and no dust or foreign matter has collected and blocked the holes in the perforated liner elements.