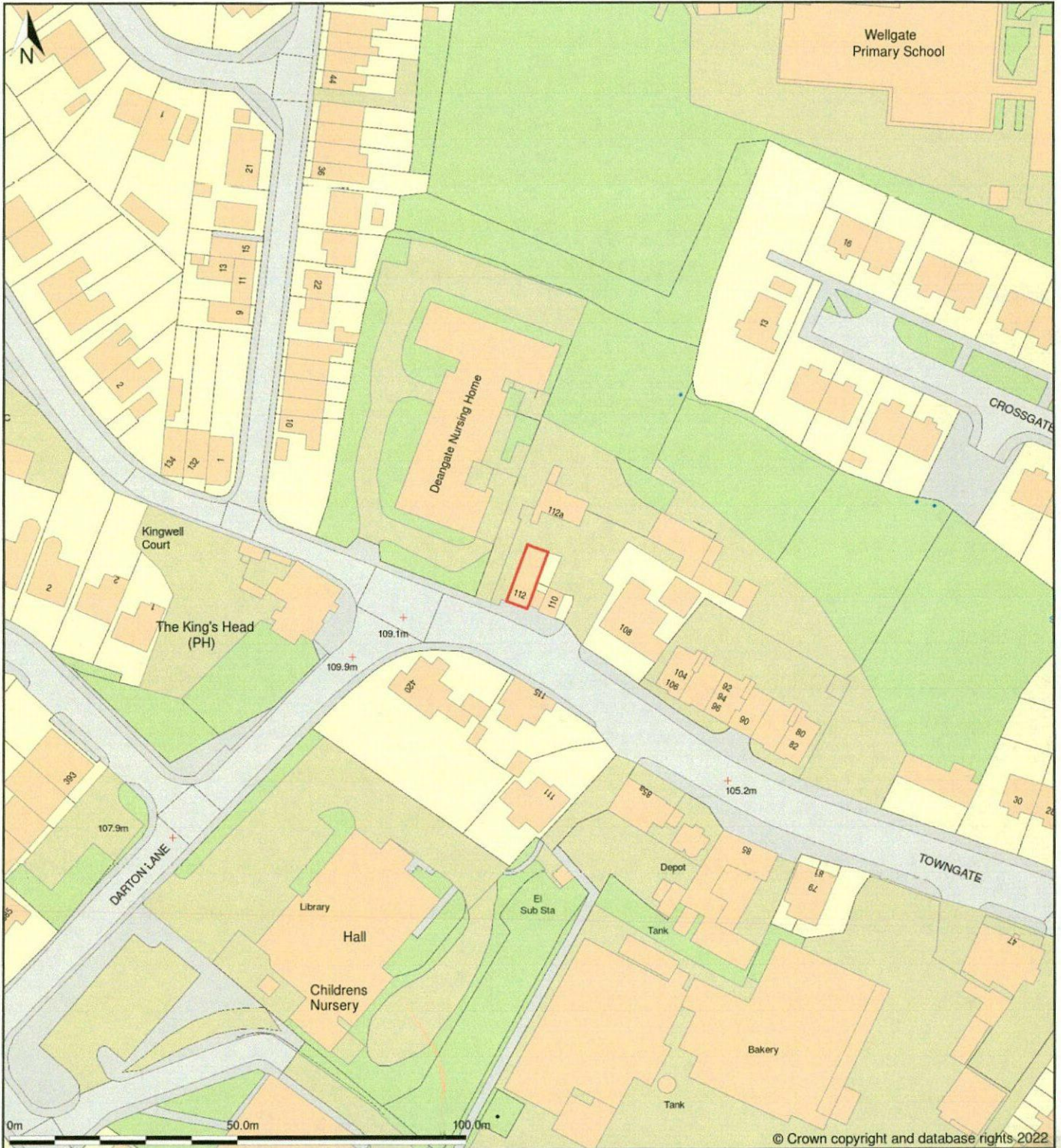


112, Towngate, Mapplewell, Barnsley, S75 6AS



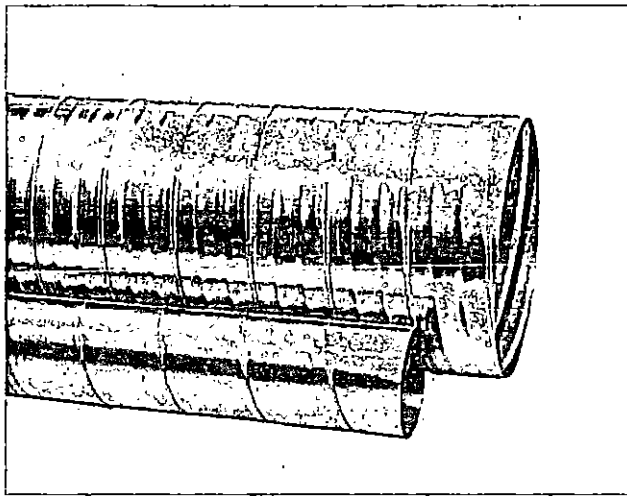
Plan shows area bounded by: 432656.47, 409994.75 432885.88, 410248.7 (at a scale of 1:1250), OSGridRef: SE32771012. The representation of a road, track or path is no evidence of a right of way. The representation of features as lines is no evidence of a property boundary.

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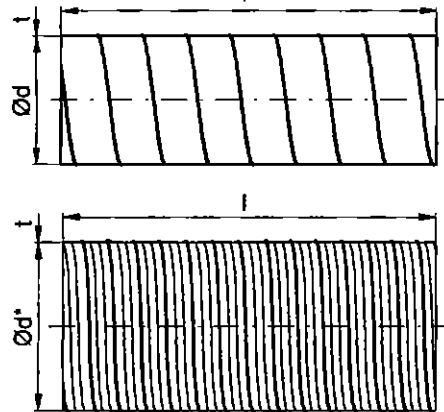
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# Circular duct

SR



## Dimensions



## Description

Circular duct.

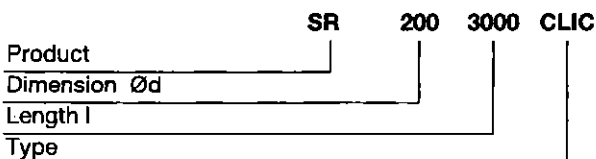
Ducts are always produced locally and can therefore have different thicknesses and other specifications per country.

The ducts can be produced both with and without click function (notches).

Please specify when ordering.

Ød std nom	O πd m	A πd <sup>2</sup> /4 m <sup>2</sup>	t std mm	l std mm	ml std kg/m
63	0,198	0,003	0,5	3000	0,89
80	0,251	0,005	0,45	3000	0,91
100	0,314	0,008	0,45	3000	1,14
112	0,352	0,010	0,5	3000	1,42
125	0,393	0,012	0,45	3000	1,41
140	0,440	0,015	0,5	3000	1,76
150	0,471	0,018	0,5	3000	1,89
160	0,503	0,020	0,5	3000	2,02
180	0,565	0,025	0,5	3000	2,26
200	0,628	0,031	0,5	3000	2,56
224	0,704	0,039	0,6	3000	3,42
250*	0,785	0,049	0,5	3000	3,18
280	0,880	0,062	0,55	3000	3,92
300*	0,942	0,071	0,55	3000	4,20
315*	0,990	0,078	0,55	3000	4,41
355*	1,115	0,099	0,55	3000	4,96
400*	1,257	0,126	0,55	3000	6,01
450*	1,414	0,159	0,7	3000	8,60
500*	1,571	0,196	0,7	3000	9,54
560*	1,759	0,246	0,8	3000	12,2
600*	1,885	0,283	0,7	3000	13,1
630*	1,979	0,312	0,7	3000	12,0
710*	2,231	0,396	0,8	3000	15,5
800*	2,513	0,503	0,8	3000	17,4
900*	2,827	0,636	0,9	3000	21,7
1000*	3,142	0,785	0,9	3000	24,1
1120*	3,519	0,985	0,9	3000	27,0
1250*	3,927	1,227	0,9	3000	30,2
1400*	4,398	1,539	1,25	2400	48,0
1500*	4,712	1,767	1,25	2400	51,4
1600*	5,027	2,011	1,25	2400	54,8

## Ordering example

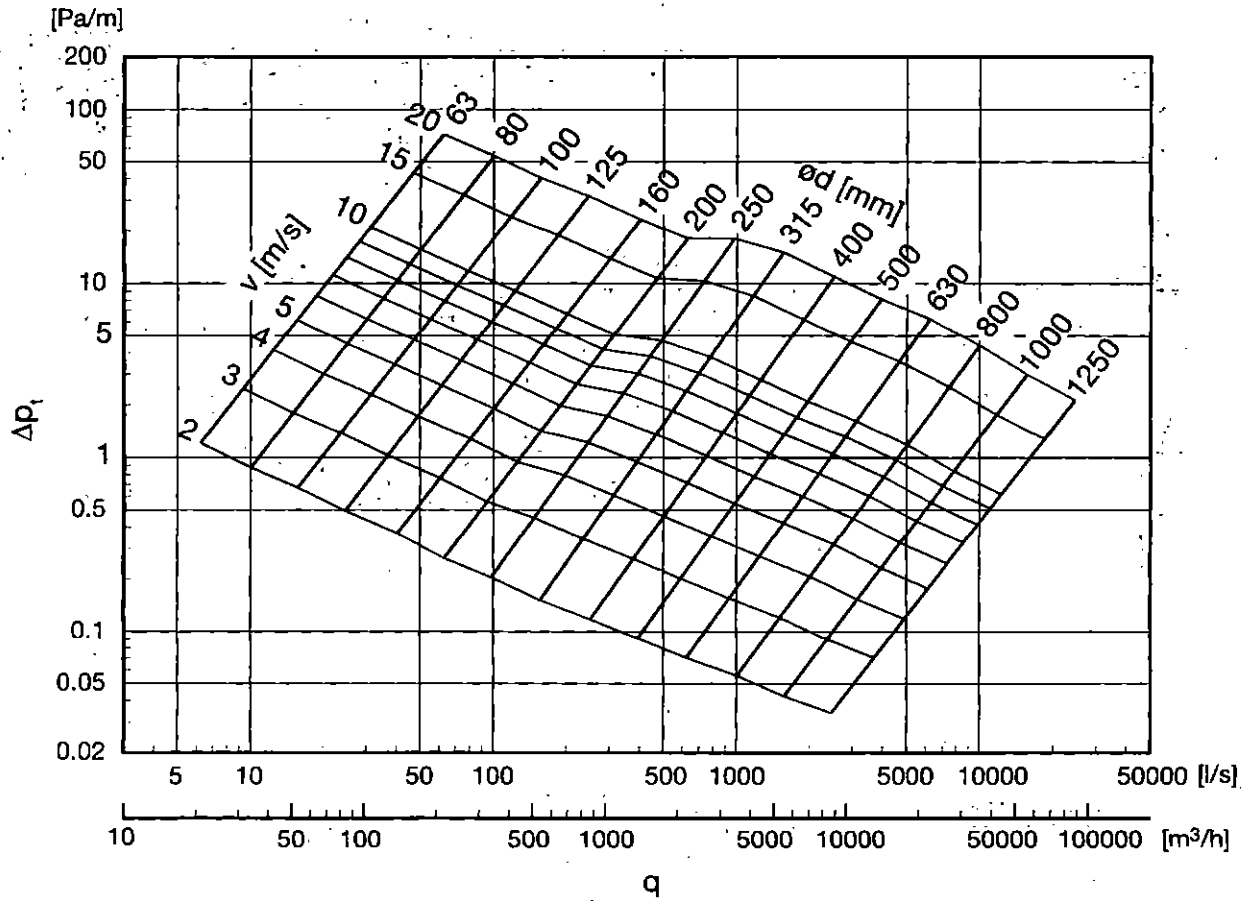


\* With outturned stiffening corrugation.

# Circular duct

# SR

## Technical data



3

# Circular duct

SR

## Technical data

### Special versions

We can supply ducts with the following special designs:

- In intermediate dimensions, see page 15.
- Extra tight, with nitrile rubber seal in the lock seam
- In other sheet metal thicknesses

#### Extra tight, with seam seal

When extremely good sealing is required in the spiral seam, the ducts can also be supplied with a special rubber seal in the seam.

This seal is very effective at stopping leakage of vegetable oils and greases, and most petroleum products including white spirit.

#### Other sheet metal thicknesses

If extra stability is needed in ducts, because of high negative pressure etc., they can be supplied with thicker sheet metal than standard. Remember that the thickness increase always reduces the inner diameter. Fittings for such special ducts must be specified separately and sometimes have to be made specially.

#### Reinforcement corrugations

Ducts of Ø250 mm and above are normally given stiffening corrugations to increase radial stiffness.

## Strength

### Positive pressure

In case of high positive pressure, the seal moulding lips will first start to whistle. At considerably higher pressure, the joints between the ducts will be forced apart. If you manage to fix the connections very well, the ducts will burst at their seams at even higher pressure. The high pressures needed for this to happen are not relevant to ventilation installations.

### Negative pressure

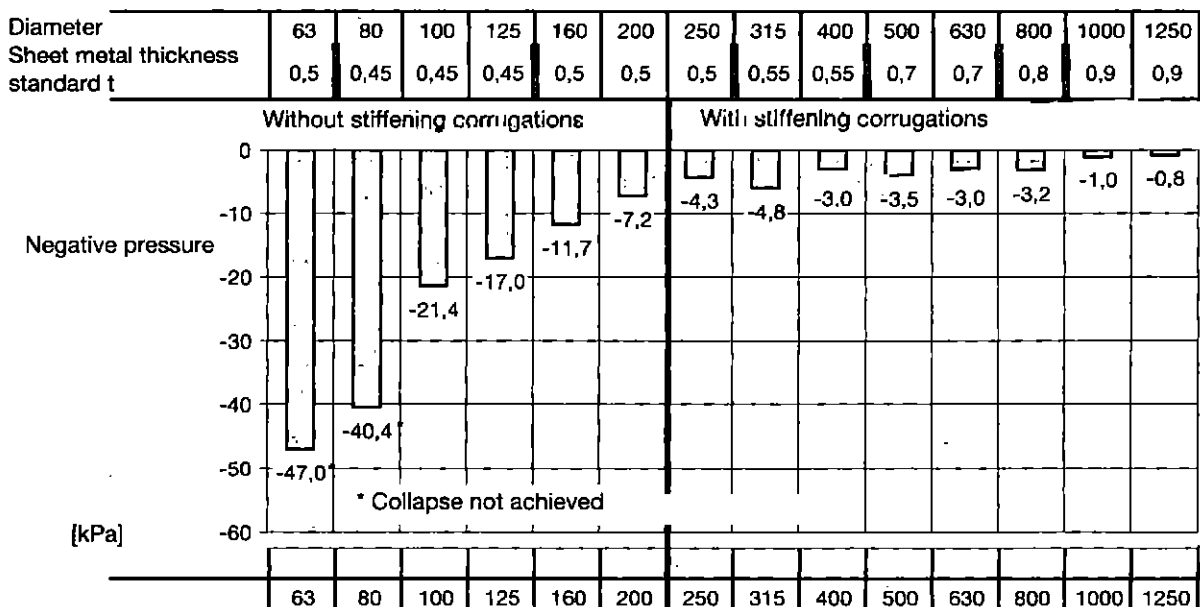
In installations with high negative pressure, there is a risk that the ducts could collapse.

This phenomenon is referred to as buckling, and can suddenly happen at the weakest point in the system. Buckling wanders along the duct, which can be completely flattened. The weakest point is frequently a "transport dent" on a duct. For this reason, only use undamaged ducts in systems which are close to the critical pressure!

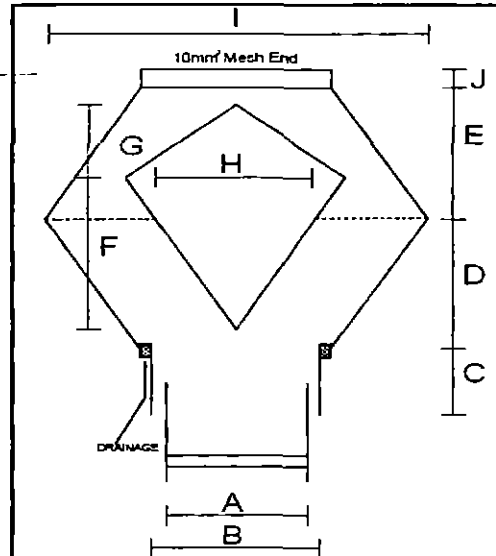
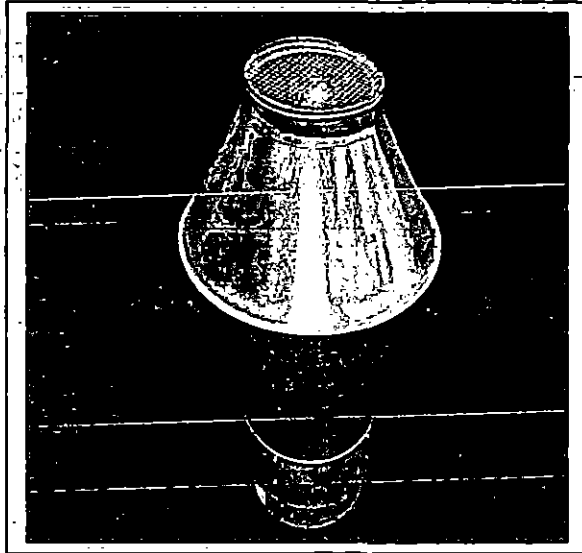
### Sealing

The ability of the seal moulding to seal is different from these pressures, and is noted on page 45.

Collapsing pressure



## HIGH VELOCITY ROOF COWL



Dimension Table

MM	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	I (mm)	WEIGHT KG's
150	150	190	250	350	250	250	100	200	450	5.40
200	200	240	250	350	250	250	100	250	500	7.00
250	250	290	250	350	250	250	100	300	550	8.40
315	315	355	250	350	250	250	100	365	615	9.20
355	355	395	250	350	250	250	100	405	655	13.20
400	400	440	250	350	250	250	100	450	700	14.80
450	450	490	250	350	250	250	100	500	750	16.20
500	500	540	250	350	250	250	100	550	800	17.60
560	560	600	250	350	250	250	100	610	860	19.80
630	630	670	250	350	250	250	100	680	930	22.00

### Description

The High velocity cowl/Ventilation hood is designed to eject the air vertically to avoid low level contamination and to achieve an efflux velocity of 12-15m/s as referred to in DW172 Kitchen ventilation rates. The cowl is made/manufactured from galvanised sheet metal and in accordance with DW144, the top of the cowling is fitted with a 10mm bird mesh to avoid any nesting and at the bottom is a 40mm opening over and above the duct diameter (see Dim A and B) which allows any rain water to run off the diamond shaped cone and drain safely away (as detailed in Dim H).

The HVC cowling is perfect for such applications as Kitchens, Fume extraction, spray booths or any other areas where the air needs to be propelled into atmosphere typical example any adjacent houses/buildings that requires air to reach above the apex of a building.

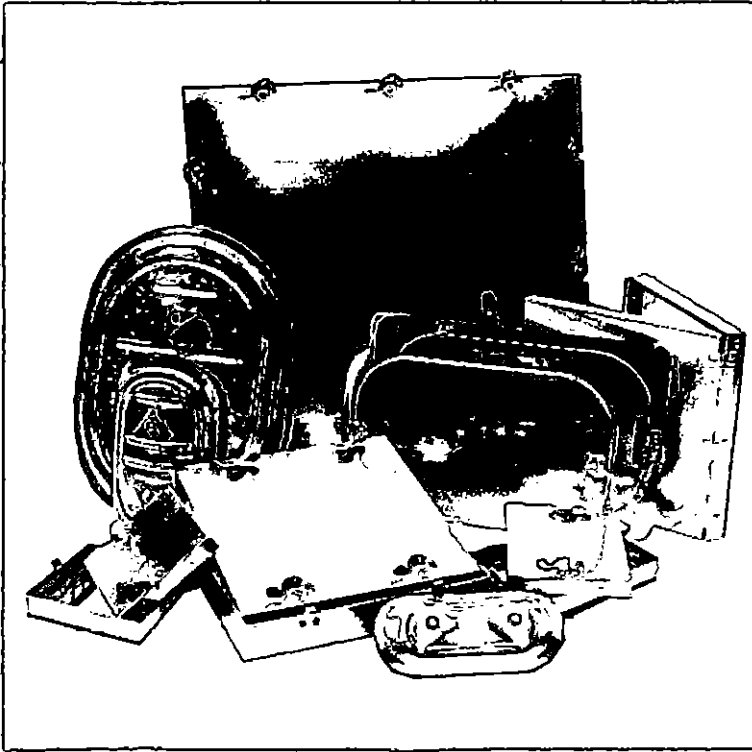
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# AJS

# ACCESS DOOR RANGE



## PRODUCT RANGE

- Insulated double skinned tabbed access door.
- Fire Retardant double skinned tabbed access door.
- Insulated double skinned pressed access door.
- Un-insulated double skinned pressed curved access door.
- Un-insulated double skinned pressed flat oval access door.

### Available Options

- 25mm Deep.
- 50mm Deep.
- Factory fitted safety retaining chain.
- Factory fitted hinge.

### Material Options

- Galvanised Mild Steel
- 304 Stainless Steel.
- 316 Stainless Steel.

## Description / Full Features:

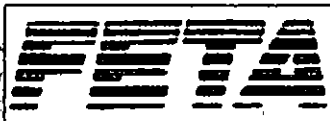
Manufactured in the U.K. The AJS range of access doors have been designed for both strength and to gain easy and safe access to all in-duct equipment for inspection, maintenance and duct cleaning purposes.

Our range offers suitability for low to medium and high pressure systems for use on rectangular and spiral/circular ductwork.

### Certification

- BSRIA Quality approved pressure tested.

AJS are proud to be associated with:



Every effort is made to ensure the information in AJS literature is correct, however no warranty is given in this respect and the company shall not be liable as a result of any inaccuracy. The company has a policy of continuous product development and reserves the right to alter, at any time, specification without prior notice.

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## TABBED ACCESS DOOR RANGE

### PRODUCT RANGE

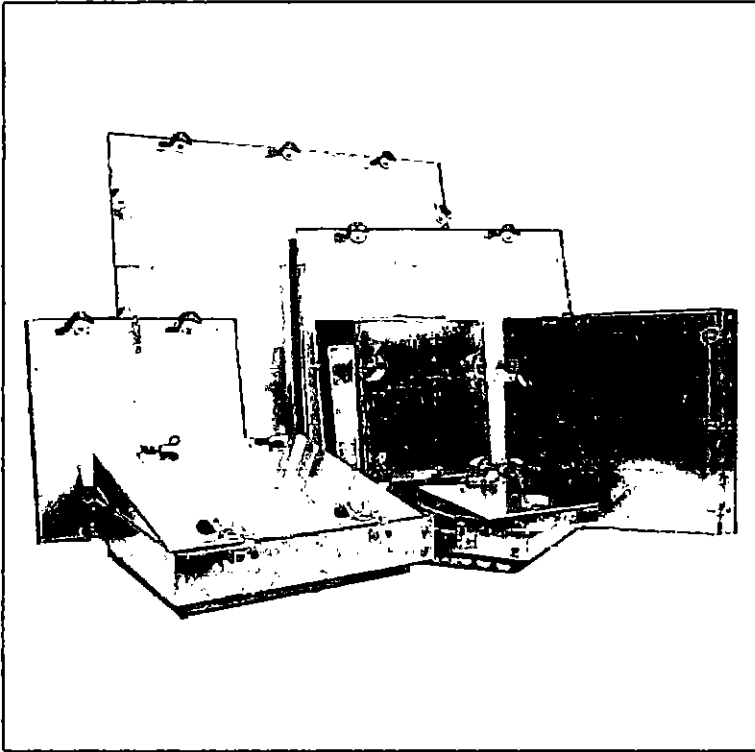
- Insulated double skinned tabbed access door.
- Fire Retardant double skinned tabbed access door.

#### Available Options

- 25mm Deep.
- 50mm Deep.
- Factory fitted safety retaining chain.
- Factory fitted hinge.

#### Material Options

- Galvanised Mild Steel
- 304 Stainless Steel.
- 316 Stainless Steel.



### Description / Full Features:

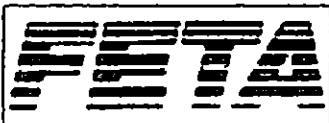
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Our range offers suitability for low to medium and high pressure systems for use on rectangular ductwork.

#### Certification

- BSRIA Quality approved pressure tested.

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## STANDARD ACCESS DOOR RANGE

### STANDARD CAM OPERATED INSULATED ACCESS DOOR



#### Description:

The AJS range of galvanised mild steel standard (Cam Operated) access doors, manufactured by ourselves in the UK, offers a quick and simple solution to gain easy and safe access to all in-duct equipment for inspection, maintenance and duct cleaning purposes.

Complete with a fully removable double skinned panel and radius knock over tabbed sub-frame.

#### Certification

- BSRIA Quality approved pressure tested.



#### Full Features:

- Easy to install
- Double skinned construction.
- Manufactured from 0.8mm galvanised mild steel (as standard).
- Encapsulating 25mm 60 kg/m<sup>2</sup> Rockwool Insulation.
- 6mm closed cell polyethylene gasket adhered to both inner & outer sub-frame, reducing the risk of air leakage.
- A positive seal is achieved via 1.2mm progressive action cam lock fasteners
- Radius knock-over tabs, reducing the risk of personal injury when handling

#### Door Depth

- 25mm Deep.
- 50mm Deep.

#### Fire Retardant Options

- Encapsulating 25mm 128kg Ceramic Blanket Insulation.
- 6mm (FMVSS 302) PVC Gasket adhered to both inner & outer sub-frame.

#### Material Options

- Galvanised Mild Steel.
- 304 Stainless Steel.
- 316 Stainless Steel.

Manufacturer & Stockist  
of

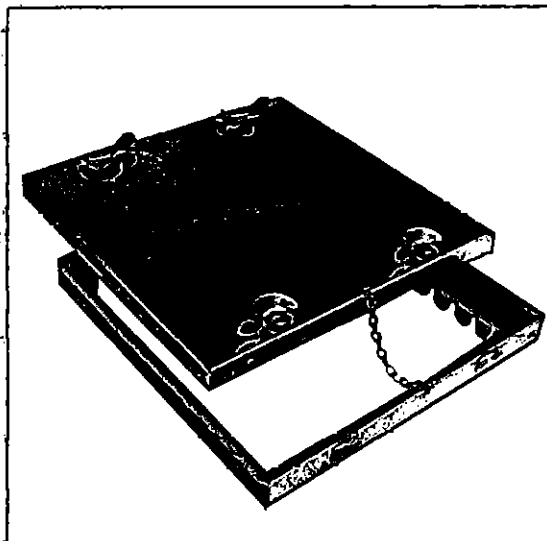
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# AJS

## CHAINED ACCESS DOOR RANGE

### CAM OPERATED INSULATED CHAINED ACCESS DOOR



#### Description:

The AJS range of (Cam Operated) chained access doors, manufactured by ourselves in the UK, offering a quick and simple solution to gain easy and safe access to all in-duct equipment for inspection, maintenance and dust cleaning purposes.

As with our standard access door, a fully removable, double skinned panel and radius knock over tabbed sub-frame, with the additional feature of a factory fitted safety retaining chain attached to both the door panel and sub frame, to assist in the prevention of injury and damage from the panel falling/being dropped whilst Removing.

#### Certification

- BSRIA Approved Quality Pressure Tested.



#### Full Features:

- Easy to install.
- Double skinned construction.
- Manufactured from 0.8mm galvanised mild steel (as standard).
- Encapsulating 25mm 60 kg/m<sup>2</sup> Rockwool Insulation.
- 6mm closed cell polyethylene gasket adhered to both inner & outer sub-frame, reducing the risk of air leakage.
- A positive seal is achieved via 1.2mm progressive action cam lock fasteners.
- Radius knock-over tabs, reducing the risk of personal injury when handling.
- Factory fitted safety retaining chain (welded oval link, bright zinc plated mild steel) attached to both door panel & sub-frame.

#### Door Depth Options

- 25mm Deep.
- 50mm Deep.

#### Fire Retardant Options:

- Encapsulating 25mm 126kg Ceramic Blanket Insulation.
- 6mm (FMVSS-302) PVC Gasket adhered to both inner & outer sub-frame.

#### Material Options

- Galvanised Mild Steel.
- 304 Stainless Steel.
- 316 Stainless Steel.

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# AJS

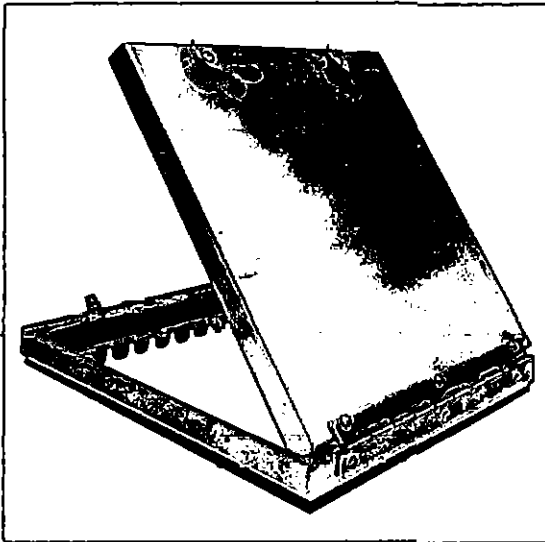
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## HINGED ACCESS DOOR RANGE

### CAM OPERATED INSULATED HINGED ACCESS DOOR



#### Description:

The AJS range of (Cam Operated) hinged access doors manufactured by ourselves in the UK, offering a quick and simple solution to gain easy and safe access to all in-duct equipment for inspection, maintenance and duct cleaning purposes.

As with our standard access door, a removable double skinned panel and radius knock over tabbed sub-frame with the feature of a factory fitted full length piano hinge, attached to both the door panel and sub frame to assist in the additional prevention of injury and damage from the panel falling/being dropped whilst removing.

#### Certification

- BSRIA Approved Quality Pressure Tested.



#### Full Features:

- Easy to install.
- Double skinned construction.
- Manufactured from 0.8mm galvanised mild steel (as standard).
- Encapsulating 25mm 60 kg/m<sup>2</sup> Rockwool Insulation.
- 6mm closed cell polyethylene gasket adhered to both inner & outer sub-frame, reducing the risk of air leakage.
- A positive seal is achieved via 1.2mm progressive action cam lock fasteners
- Radius knock-over tabs, reducing the risk of personal injury when handling.
- Factory fitted full length piano hinge (1.5" open, bright zinc plated mild steel) attached to both door panel & sub-frame.

#### Door Depth Options

- 25mm Deep.
- 50mm Deep.

#### Fire Retardant Options

- Encapsulating 25mm 128kg Ceramic Blanket Insulation.
- 6mm (FMVSS 302) PVC Gasket adhered to both inner & outer sub-frame.

#### Material Options

- Galvanised Mild Steel.
- 304 Stainless Steel.
- 316 Stainless Steel.

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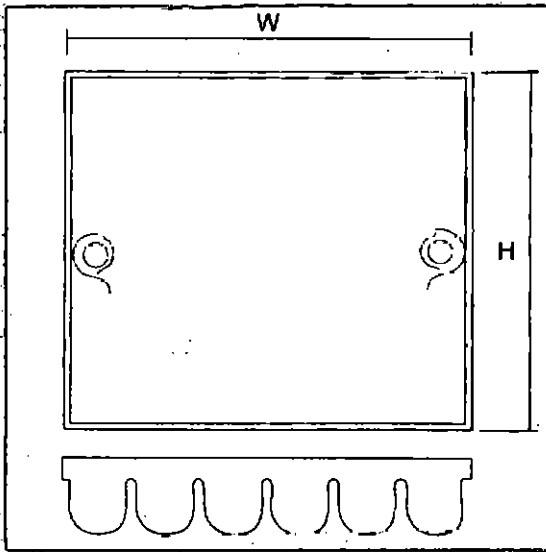
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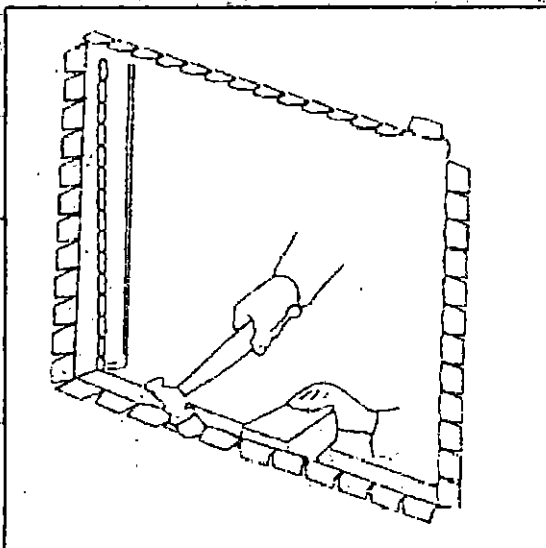
## ACCESS DOOR DIMENSIONS & INSTALLATION METHOD

### SQUARE & RECTANGULAR ACCESS DOORS



#### INSTALLATION METHOD

1. Cut opening in duct to dimensions shown.
2. Offer access panel sub-frame into opening and knock over tab edges while supporting sub-frame firmly onto duct.



STANDARD SIZES HELD IN STOCK	
DOOR & FRAME	REQUIRED DUCT
OVERALL SIZE	OPENING SIZE
W (mm) X H (mm)	W (mm) X H (mm)
100 X 100	60 X 60
150 X 100	110 X 60
150 X 150	110 X 110
200 X 100	160 X 60
200 X 150	160 X 110
200 X 200	160 X 160
250 X 150	210 X 110
250 X 200	210 X 160
250 X 250	210 X 210
300 X 150	260 X 110
300 X 200	260 X 160
300 X 300	260 X 260
400 X 200	360 X 160
400 X 300	360 X 260
400 X 400	360 X 360
450 X 300	410 X 260
450 X 450	410 X 410
500 X 500	460 X 460
600 X 300	560 X 260
600 X 400	560 X 360
600 X 450	560 X 410
600 X 600	560 X 560
ALL SIZES ARE APPROXIMATE	

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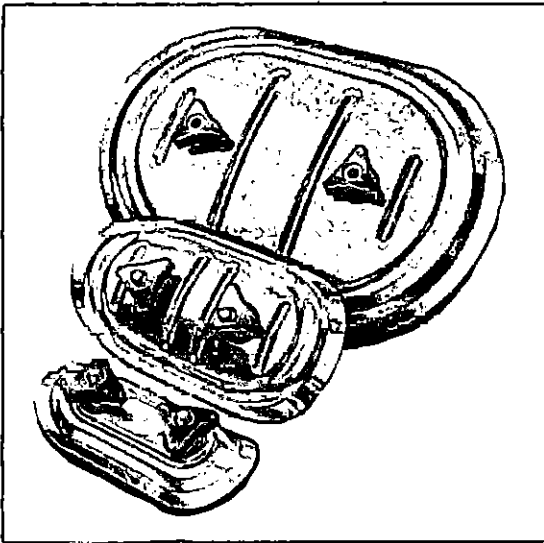
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## EASY FIT ACCESS DOOR RANGE

### EASY FIT UN-INSULATED ACCESS DOOR



#### Description:

The AJS range of easy fit access doors are manufactured by ourselves in the UK and have been designed for both strength and to gain safe and easy access to all in-duct equipment for inspection, maintenance and duct cleaning purposes.

#### Size Options - Suitable for Spiral/Circular Duct.

- Type A - 200mmx80mm to suit 80 - 150mm Ø
- Type B - 250mmx150mm to suit 150 - 450mm Ø
- Type C - 400mmx300mm to suit 400 - 1016mm Ø

#### Suitable for Rectangular & Flat Oval Duct.

- Type A - 200mmx80mm
- Type B - 250mmx150mm
- Type C - 400mmx300mm

#### Full Features:

- Double skinned construction.
- Manufactured from 0.8mm galvanised mild steel (as standard).
- Individually pressed to suit duct diameter.
- 6mm closed cell polyethylene gasket adhered to the inner panel sealing the duct internally.
- A positive seal is achieved via 2 external thermo plastic, tri-star threaded (m10) hand wheels, tightened onto press fitted internal fully threaded (m10) cut bolts. (Zinc plated mild steel)
- Conical stainless steel springs fitted between the inner and outer panel offers a sprung separation for ease of installation and removal.
- Set bolt ends are pressed to purposely defect the thread ends, not allowing the access door to be completely disassembled, reducing the risk of the inner panel separating and falling into the duct, causing damage to other equipment.
- Self adhesive disposable duct hole cut out template, complete with installation instructions packaged with each access door.
- Optional - rubber edging strip (cut to size) for the duct hole rough edges, reducing the risk of personal injury when the access door is removed for duct cleaning and maintenance purposes.

#### Available Options

- Rubber - Safe edging strip.
- Factory fitted safety retaining chain.

#### Material Options

- Galvanised Mild Steel.
- 304 Stainless Steel.
- 316 Stainless Steel.

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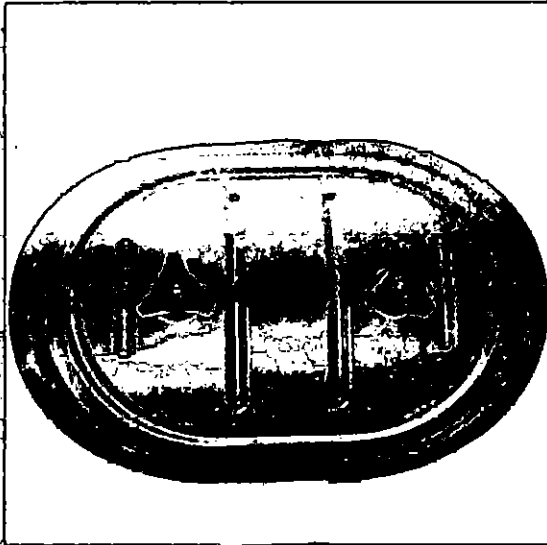
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# AJS

## EASY FIT STANDARD ACCESS DOOR RANGE

### EASY FIT UN-INSULATED STANDARD ACCESS DOOR



#### Description:

The AJS range of easy fit galvanized mild steel standard access doors are manufactured by ourselves in the UK and have been designed for both strength and to gain safe and easy access to all in-duct equipment for inspection, maintenance and duct cleaning purposes.

#### Size Options

- Type A - 200mmx80mm to suit 80-150mm Ø
- Type B - 250mmx150mm to suit 150-450mm Ø
- Type C - 400mmx300mm to suit 400-1016mm Ø

#### Optional

- Rubber edging strip (cut to size) for the duct hole rough edges, reducing the risk of personal injury when the access door is removed for duct cleaning and maintenance purposes.

#### Full Features:

- Double skinned construction.
- Manufactured from 0.8mm galvanised mild steel (as standard).
- Individually pressed to suit duct diameter.
- 6mm closed cell polyethylene gasket adhered to the inner panel sealing the duct internally.
- A positive seal is achieved via 2 external thermo plastic, tri-star threaded (m10) hand wheels, tightened onto press fitted internal fully threaded (m10) set bolts. (Zinc plated mild steel)
- Conical stainless steel springs fitted between the inner and outer panel offers a sprung separation for ease of installation and removal.
- Set bolt ends are pressed to purposely defect the thread ends, not allowing the access door to be completely disassembled, reducing the risk of the inner panel separating and falling into the duct, causing damage to other equipment.
- Self adhesive disposable duct hole cut out template, complete with installation instructions packaged with each access door.
- Optional - rubber edging strip (cut to size) for the duct hole rough edges, reducing the risk of personal injury when the access door is removed for duct cleaning and maintenance purposes.

#### Available Options

- Rubber - Safe edging strip.
- Factory fitted safety retaining chain.

#### Material Options

- Galvanised Mild Steel.
- 304 Stainless Steel.
- 316 Stainless Steel.

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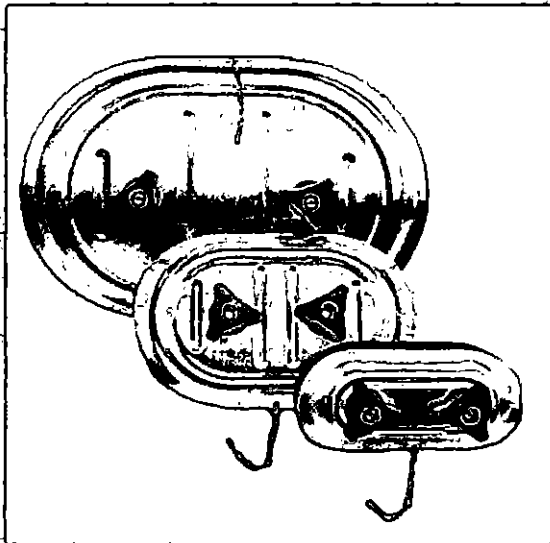
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[www.ajs-vent.co.uk](http://www.ajs-vent.co.uk)

# AJS

## EASY FIT CHAINED ACCESS DOOR RANGE

### EASY FIT UNINSULATED CHAINED ACCESS DOOR



#### Description:

The AJS range of easy fit galvanized mild steel Chained access doors are manufactured by ourselves in the UK and have been designed for both strength and to gain safe and easy access to all in-duct equipment for inspection, maintenance and duct cleaning purposes. As with our standard access door, a fully removable, double skinned panel with the additional feature of a factory fitted safety retaining chain (one end) attached to the outer door panel, leaving the other end of the chain to be fixed to the duct to assist in the prevention of injury and damage from the panel falling/being dropped whilst removing.

#### Size Options

- Type A - 200mm x 80mm to suit 80 - 150mm Ø
- Type B - 250mm x 150mm to suit 150 - 450mm Ø
- Type C - 400mm x 300mm to suit 400 - 1016mm Ø

#### Full Features:

- Double skinned construction.
- Manufactured from 0.8mm galvanized mild steel (as standard).
- Individually pressed to suit duct diameter.
- 6mm closed cell polyethylene gasket adhered to the inner panel sealing the duct internally.
- A positive seal is achieved via 2 external thermo plastic, tri-star threaded (M10) hand wheels, tightened onto press fitted internal fully threaded (M10) set bolts. (Zinc plated mild steel)
- Central stainless steel springs fitted between the inner and outer panel offers a sprung separation for ease of installation and removal.
- Set bolt ends are pressed to purposely defect the thread ends, not allowing the access door to be completely disassembled, reducing the risk of the inner panel separating and falling into the duct, causing damage to other equipment.
- Self adhesive disposable duct hole cut out template, complete with installation instructions packaged with each access door.
- Optional - rubber edging strip (cut to size) for the duct hole rough edges, reducing the risk of personal injury when the access door is removed for duct cleaning and maintenance purposes.
- Factory fitted safety retaining chain.

#### Material Option

- Galvanized Mild Steel.
- 304 Stainless Steel.
- 316 Stainless Steel.

Every effort is made to ensure the information in AJS literature is correct. However no warranty is given in this respect and the company shall not be liable as a result of any inaccuracies. The company has a policy of continuous product development and reserves the right to alter, at any time, specification without prior notice.

# AJS

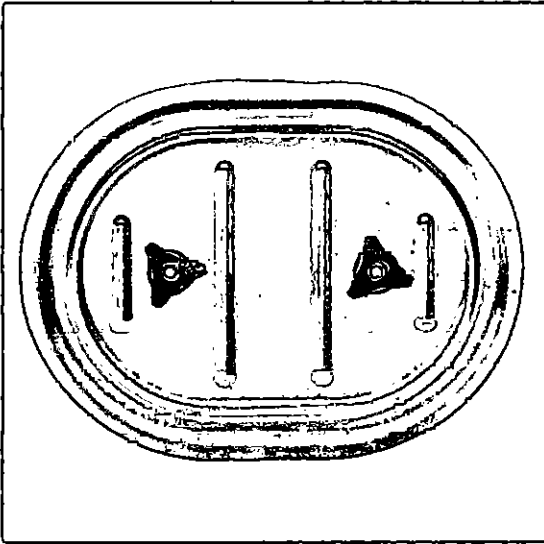
Manufacturer & Stockist  
of

Heating, Ventilation &  
Air Movement Equipment

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## EASY FIT FLAT OVAL ACCESS DOOR RANGE

### EASY FIT UN-INSULATED FLAT OVAL ACCESS DOOR



#### Description:

The AJS range of easy fit galvanized mild steel flat oval access doors are manufactured by ourselves in the UK and have been designed for both strength and to gain safe and easy access to all in-duct equipment for inspection, maintenance and duct cleaning purposes.

#### Size Options

- Type A - 200mmx80mm
- Type B - 250mmx150mm
- Type C - 400mmx300mm

#### Full Features:

- Double skinned construction.
- Manufactured from 0.8mm galvanised mild steel (as standard).
- 6mm closed cell polyethylene gasket adhered to the inner panel sealing the duct internally.
- A positive seal is achieved via 2 external thermo plastic, tri-star threaded (m10) hand wheels, tightened onto press fitted internal fully threaded (m10) set bolts. (Zinc plated mild steel)
- Conical stainless steel springs fitted between the inner and outer panel offers a sprung separation for ease of installation and removal.
- Set bolt ends are pressed to purposely defect the thread ends, not allowing the access door to be completely disassembled, reducing the risk of the inner panel separating and falling into the duct, causing damage to other equipment.
- Self adhesive disposable duct hole cut out template, complete with installation instructions packaged with each access door.
- Optional - rubber edging strip (cut to size) for the duct hole rough edges, reducing the risk of personal injury when the access door is removed for duct cleaning and maintenance purposes.

#### Material Option

- Galvanised Mild Steel.
- 304 Stainless Steel.
- 316 Stainless Steel.

# AJS

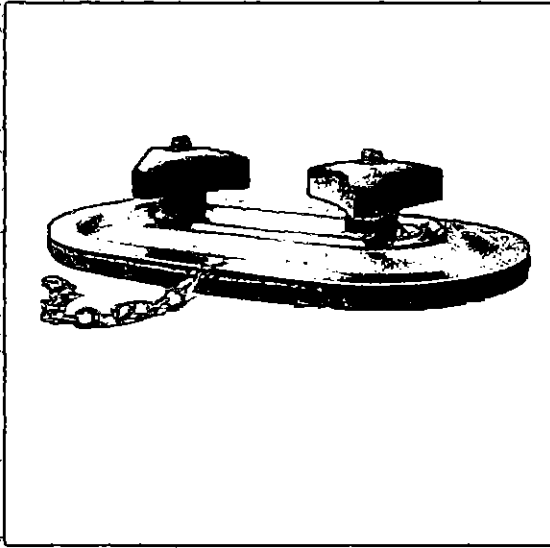
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## EASY FIT FLAT OVAL CHAINED ACCESS DOOR RANGE

### EASY FIT UN-INSULATED FLAT OVAL CHAINED ACCESS DOOR



#### Description:

The AJS range of easy fit galvanized mild steel chained flat oval access doors are manufactured by ourselves in the UK and have been designed for both strength and to gain safe and easy access to all in-duct equipment for inspection, maintenance and duct cleaning purposes.

As with our standard access door, a fully removable, double skinned panel with the additional feature of a factory fitted safety retaining chain (one end) attached to the outer door panel, leaving the other end of the chain to be fixed to the duct to assist in the prevention of injury and damage from the panel falling/being dropped whilst removing.

#### Size Options

- Type A - 200mmx80mm
- Type B - 250mmx150mm
- Type C - 400mmx300mm

#### Full Features:

- Double skinned construction.
- Manufactured from 0.8mm galvanised mild steel (as standard).
- 6mm closed cell polyethylene gasket adhered to the inner panel sealing the duct internally.
- A positive seal is achieved via 2 external thermo plastic, tri-star threaded (m10) hand wheels, tightened onto press fitted internal fully threaded (m10) set bolts, (Zinc plated mild steel)
- Conical stainless steel springs fitted between the inner and outer panel offers a sprung separation for ease of installation and removal.
- Set bolt ends are pressed to purposely defect the thread ends, not allowing the access door to be completely disassembled, reducing the risk of the inner panel separating and falling into the duct, causing damage to other equipment.
- Self adhesive disposable duct hole cut out template, complete with installation instructions packaged with each access door.
- Optional - rubber edging strip (cut to size) for the duct hole rough edges, reducing the risk of personal injury when the access door is removed for duct cleaning and maintenance purposes.
- Factory fitted safety retaining chain.

#### Material Option

- Galvanised Mild Steel.
- 304 Stainless Steel.
- 316 Stainless Steel.

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## ACCESS DOOR DIMENSIONS & INSTALLATION METHOD

### EASY FIT SPIRAL / CIRCULAR & FLAT OVAL ACCESS DOORS

#### INSTALLATION METHOD

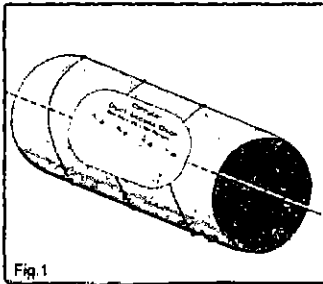


Fig. 1

#### Stage 1. (See fig.1)

1. Locate and highlight central line on the duct.
2. After Aligning the template with the centre line (using the datum line), Attach by removing the backing tape.
3. Cut the opening to the outside of the AJS template.

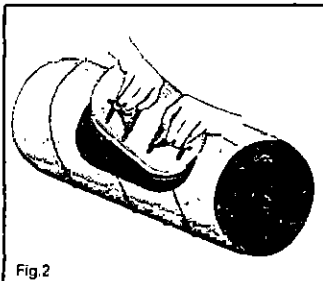


Fig. 2

#### Stage 2. (See Fig.2)

1. Locate captive hand wheels and slacken fully.
2. At a 30° angle from the centre line, feed the inner panel through the duct opening.

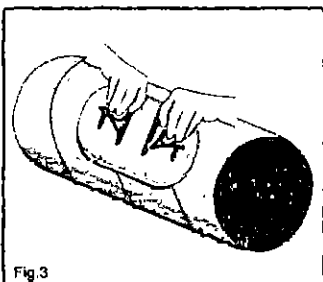


Fig. 3

#### Stage 3. (See Fig.3)

1. Bringing the door to a central position, locate to the inner door panel by pulling slowly towards you.

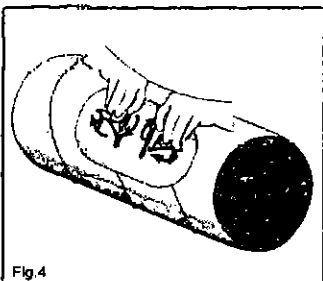


Fig. 4

#### Stage 4. (See Fig.4)

1. Fully tighten the hand wheels to seal the door to the duct.
2. Secure safety chain to duct if applicable. (Chained Access Doors ONLY)

#### STANDARD SIZES HELD IN STOCK

OVERALL DOOR SIZE	TO SUIT DUCT SIZE
W (mm) X H (mm)	DIAMETER (mm)
200 X 80	80
200 X 80	100
200 X 80	125
200 X 80	150
250 X 150	150
250 X 150	160
250 X 150	180
250 X 150	200
250 X 150	224
250 X 150	250
250 X 150	280
250 X 150	300
250 X 150	365
250 X 150	400
250 X 150	450
400 X 300	400
400 X 300	450
400 X 300	500
400 X 300	560
400 X 300	650
400 X 300	700
400 X 300	762
400 X 300	800
400 X 300	914
400 X 300	1016

ALL SIZES ARE APPROXIMATE

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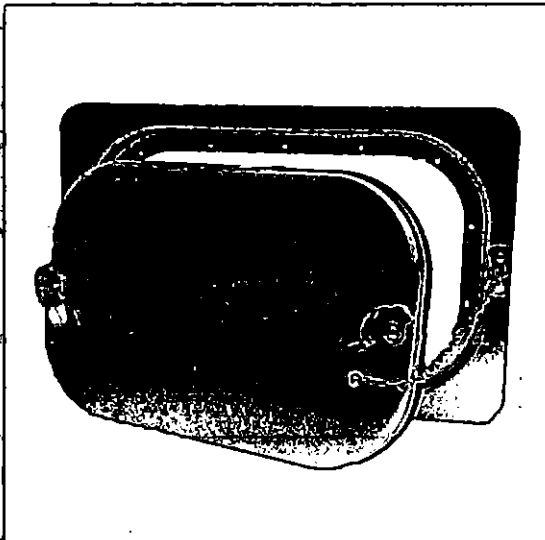
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# AJS

## PRESSED ACCESS DOOR RANGE

### INSULATED PRESSED ACCESS DOOR



#### Description:

The AJS range of pressed access doors have been designed to gain easy and safe access to all in-duct equipment for inspection, maintenance and duct cleaning. Suitable for low to high pressure systems, comprising of a seamless one piece, pre pierced (for ease of installation) sub frame that can be either flush or exterior mounted, together with a double skinned insulated door panel complete with factory fitted safety retaining chain. (as standard)

#### Size Options

- Type A - 233 x 143
- Type B - 362 x 227
- Type C - 494 x 354
- Type D - 647 x 496

#### Certification

- BSRIA Quality approved pressure tested.



#### Full Features:

- Double skinned construction.
- Manufactured from 0.7mm galvanised mild steel (as standard).
- Encapsulating 21mm fire retardant thermal and acoustic insulation.
- One piece extruded neoprene, high compression seal with self-extinguishing fire properties.
- Progressive action cam lock fasteners.
- Zinc plated safety retaining chain fitted as standard.
- Hole cutting template supplied with every carton.

#### Available Options

- 25mm Deep.
- Insulation spacer frame - 50mm
- Factory fitted safety retaining chain. (as standard)
- Factory fitted hinge.

#### Material Options

- Galvanised mild steel.
- Stainless steel.

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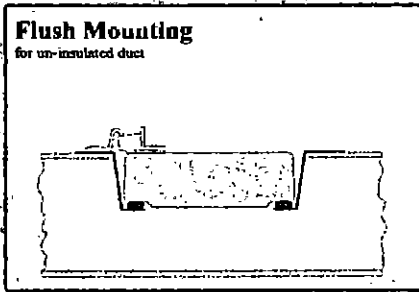
## PRESSED ACCESS DOOR RANGE

### INSULATED PRESSED ACCESS DOOR

#### Mounting Options

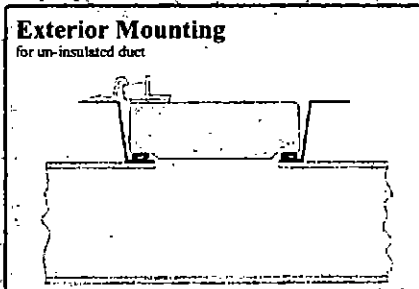
##### Flush Mounting

for un-insulated duct



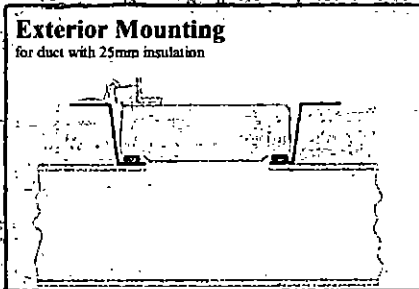
##### Exterior Mounting

for un-insulated duct



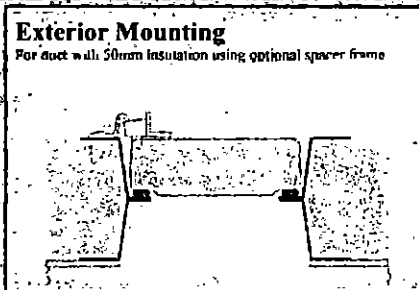
##### Exterior Mounting

for duct with 25mm insulation

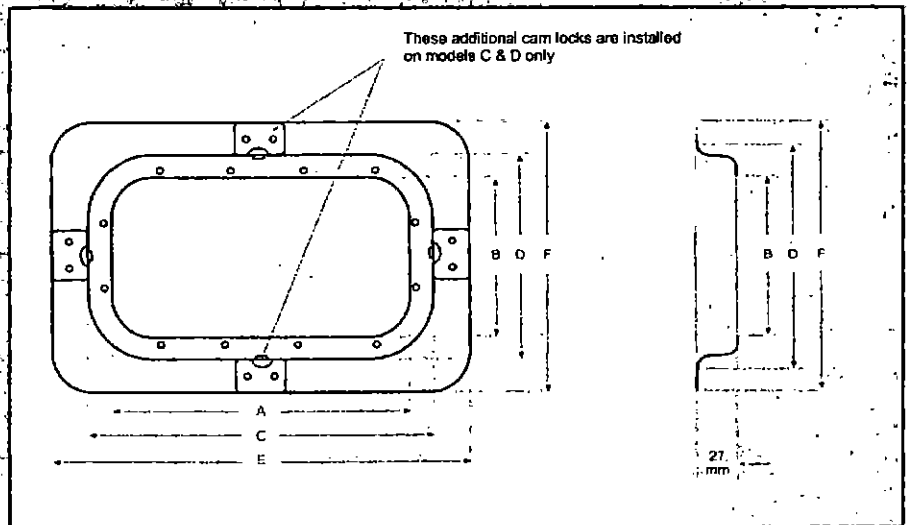


##### Exterior Mounting

For duct with 50mm insulation using optional spacer frame



#### Dimensional Data



	Type A	Type B	Type C	Type D
Nominal Door Size	255 x 145	302 x 227	494 x 354	647 x 496
No. Cams Per Door	2	2	4	4
A - Dimm (mm)	205	350	460	610
B - Dimm (mm)	115	195	320	462
C - Dimm (mm)	257	367	500	653
D - Dimm (mm)	147	252	360	502
E - Dimm (mm)	231	414	552	705
F - Dimm (mm)	191	270	412	550
Unit Weight Kg	0.83	1.60	2.95	3.72
Qty Per Carton	10	5	5	4
Weight Per Carton Kg	8.30	8.50	15.70	24.10

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## PRESSURE TEST ON DUCT ACCESS DOOR

### Carried out for & on the behalf of:

KK Manufacturing & Distribution  
a division of AJ Services - Established 1986  
Unit 7 / 78 Hutton Road  
Handsworth  
Birmingham  
B20 3RD

### Test carried out by:

P N Stonard & A L Fricker



### 1. INTRODUCTION

This report concerns pressure tests carried out on a duct access door and frame assembly. The sample was manufactured by KK Manufacturing, who also commissioned the test work carried out in the BSRIA laboratories during the period 3 February to 5 February 1992

### 2. OBJECTIVE

To determine the leakage rate from the door and frame assembly.

### 3. ITEMS SUPPLIED FOR TEST

The items supplied consisted of an access door and frame of overall dimensions 305mm x 305mm. This was mounted on a galvanised steel plenum 600mm x 600mm x 600mm. The whole assembly had been sealed to the plenum using a mastic sealant and the door frame using a foam strip arrangement.

### 4. TEST METHOD

Four sets of tests were carried out. Pressures was applied to the plenum in stages up to maximums of 2500 Pa positive and 750 Pa negative.

These were limits stated in DW142 HVCA specification for high pressure Class 'D' ductwork.

Tests were conducted with the plenum assembly "as supplied" to give gross leakage rate and with the access door assembly blanked off to give a net leakage rate. The difference between the two gave the leakage through the door assembly. Air was supplied and extracted via a centrifugal fan and venturi arrangement. Pressures being measured using digital micromanometers.

**5. RESULTS**

Gross Leakage (system, plenum, door assembly)

PLENUM PRESSURE Pa	VENTURI	
	DIFFERENTIAL PRESSURE Pa	LEAKAGE RATE 1/s
530	1.2	Less than 0.05
970	3.6	0.110
1500	9.2	0.175
1990	15.6	0.232
2480	25.6	0.302
-470	1.9	<0.05
-520	2.6	<0.05
-770	4.2	0.117

PLENUM PRESSURE Pa	VENTURI	
	DIFFERENTIAL PRESSURE Pa	LEAKAGE RATE 1/s
440	1.3	<0.05
650	2.5	<0.05
1050	4.7	0.123
1600	9.9	0.182
1900	15.1	0.230
2490	25.0	0.300
-490	2.1	<0.05
-740	4.0	0.115
-760	4.3	0.118

**6. CONCLUSIONS**

The leakage of the access door and frame was less than 0.05 1/s at all test pressures.

The test pressures did not cause permanent deformation.



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A company limited by guarantee registered in England No. 632760



## CP01 - M10 Silencer

Available in four standard lengths, M-Series Silencers have excellent attenuation properties, achieved with sound absorbing infill retained in the attenuator casing by a perforated galvanised steel liner.

- Fits directly into 100mm diameter ducting
- Standard lengths 300, 600, 900 & 1200mm
- Use up to 70°C (standard construction)
- Systems up to 1000 Pascals
- Special lengths on request



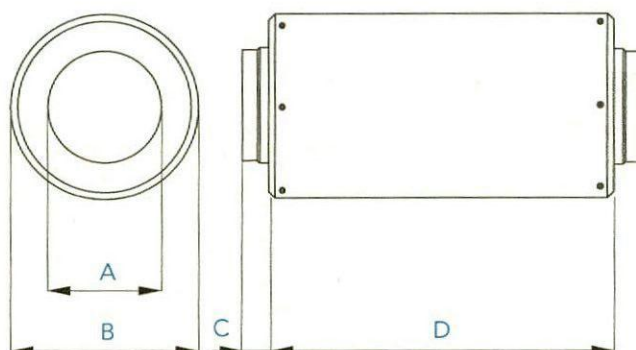
## Typical Noise Reduction (dB) - Centre Band Frequency

Product Code	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
CP01 - M10 - 030	3	4	9	17	23	26	25	14
CP01 - M10 - 060	5	8	15	33	39	40	36	20
CP01 - M10 - 090	10	13	21	40	45	40	36	24
CP01 - M10 - 120	12	15	23	42	47	42	38	26

Typical noise reduction 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)	D (mm)	Weight (kg)
CP01 - M10 - 030	98	203	35	300	3
CP01 - M10 - 060	98	203	35	600	5
CP01 - M10 - 090	98	203	35	900	7
CP01 - M10 - 120	98	203	35	1200	9



## CP01 - M12 Silencer

Available in four standard lengths, M-Series Silencers have excellent attenuation properties, achieved with sound absorbing infill retained in the attenuator casing by a perforated galvanised steel liner.

- Fits directly into 100mm diameter ducting
- Standard lengths 300, 600, 900 & 1200mm
- Use up to 70°C (standard construction)
- Systems up to 1000 Pascals
- Special lengths on request



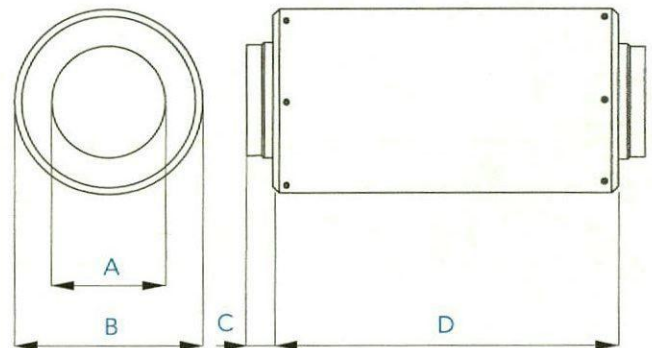
## Typical Noise Reduction (dB) - Centre Band Frequency

Product Code	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
CP01 - M12 - 030	3	3	8	16	21	24	22	12
CP01 - M12 - 060	4	8	13	30	35	35	31	15
CP01 - M12 - 090	9	12	18	37	41	38	34	20
CP01 - M12 - 120	11	15	21	40	46	41	36	23

Typical noise reduction 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)	D (mm)	Weight (kg)
CP01 - M12 - 030	123	230	35	300	3
CP01 - M12 - 060	123	230	35	600	6
CP01 - M12 - 090	123	230	35	900	8
CP01 - M12 - 120	123	230	35	1200	10



## CP01 - M15 Silencer

Available in four standard lengths, M-Series Silencers have excellent attenuation properties, achieved with sound absorbing infill retained in the attenuator casing by a perforated galvanised steel liner.

- Fits directly into 100mm diameter ducting
- Standard lengths 300, 600, 900 & 1200mm
- Use up to 70°C (standard construction)
- Systems up to 1000 Pascals
- Special lengths on request



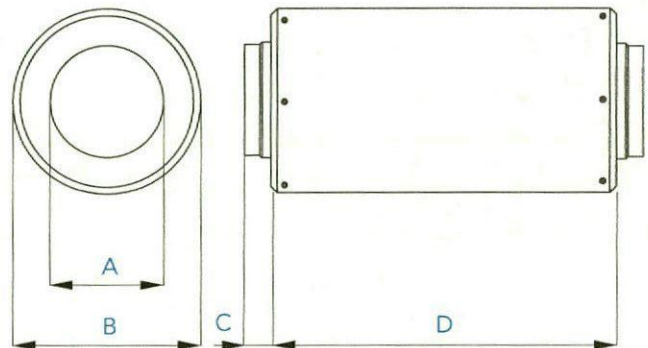
## Typical Noise Reduction (dB) - Centre Band Frequency

Product Code	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
CP01 - M15 - 030	3	3	6	13	19	23	22	11
CP01 - M15 - 060	4	7	12	23	30	36	31	15
CP01 - M15 - 090	8	9	15	31	37	37	34	18
CP01 - M15 - 120	10	14	17	34	41	40	36	20

Typical noise reduction 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)	D (mm)	Weight (kg)
CP01 - M15 - 030	148	254	35	300	4
CP01 - M15 - 060	148	254	35	600	6
CP01 - M15 - 090	148	254	35	900	9
CP01 - M15 - 120	148	254	35	1200	11



## CP01 - M20 Silencer

Available in four standard lengths, M-Series Silencers have excellent attenuation properties, achieved with sound absorbing infill retained in the attenuator casing by a perforated galvanised steel liner.

- Fits directly into 100mm diameter ducting
- Standard lengths 300, 600, 900 & 1200mm
- Use up to 70°C (standard construction)
- Systems up to 1000 Pascals
- Special lengths on request



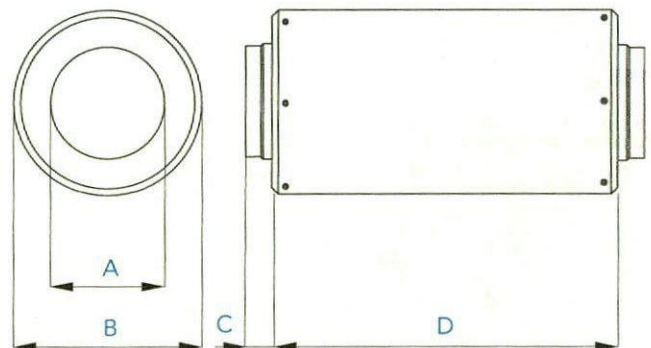
## Typical Noise Reduction (dB) - Centre Band Frequency

Product Code	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
CP01 - M20 - 030	2	3	6	13	17	20	18	9
CP01 - M20 - 060	4	6	10	20	27	32	20	11
CP01 - M20 - 090	7	9	14	32	39	36	26	15
CP01 - M20 - 120	10	12	17	35	41	44	28	16

Typical noise reduction 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)	D (mm)	Weight (kg)
CP01 - M20 - 030	198	302	35	300	4
CP01 - M20 - 060	198	302	35	600	8
CP01 - M20 - 090	198	302	35	900	11
CP01 - M20 - 120	198	302	35	1200	15



## CP01 - M25 Silencer

Available in four standard lengths, M-Series Silencers have excellent attenuation properties, achieved with sound absorbing infill retained in the attenuator casing by a perforated galvanised steel liner.

- Fits directly into 100mm diameter ducting
- Standard lengths 300, 600, 900 & 1200mm
- Use up to 70°C (standard construction)
- Systems up to 1000 Pascals
- Special lengths on request



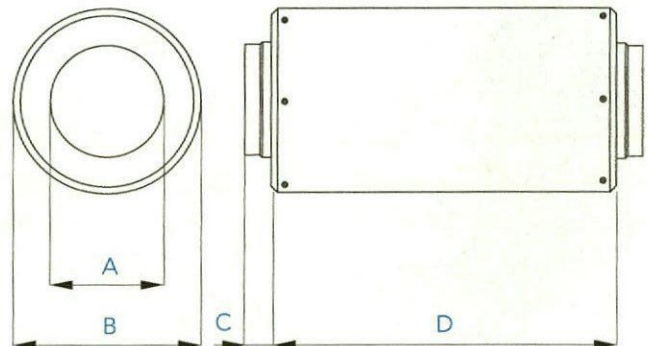
## Typical Noise Reduction (dB) - Centre Band Frequency

Product Code	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
CP01 - M25 - 030	2	3	6	12	16	19	17	8
CP01 - M25 - 060	3	6	10	19	25	29	18	10
CP01 - M25 - 090	5	8	12	24	30	30	22	14
CP01 - M25 - 120	7	10	15	31	37	38	26	15

Typical noise reduction 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)	D (mm)	Weight (kg)
CP01 - M25 - 030	248	352	35	300	5
CP01 - M25 - 060	248	352	35	600	9
CP01 - M25 - 090	248	352	35	900	13
CP01 - M25 - 120	248	352	35	1200	17



## CP01 - M30 Silencer

Available in four standard lengths, M-Series Silencers have excellent attenuation properties, achieved with sound absorbing infill retained in the attenuator casing by a perforated galvanised steel liner.

- Fits directly into 100mm diameter ducting
- Standard lengths 300, 600, 900 & 1200mm
- Use up to 70°C (standard construction)
- Systems up to 1000 Pascals
- Special lengths on request



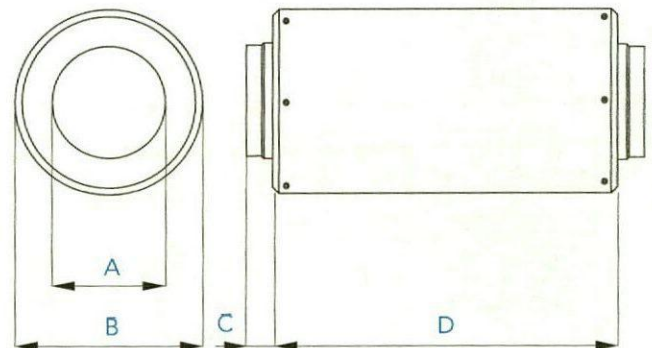
## Typical Noise Reduction (dB) - Centre Band Frequency

Product Code	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
CP01 - M30 - 030	2	3	6	12	15	18	16	8
CP01 - M30 - 060	3	5	9	16	22	24	16	14
CP01 - M30 - 090	4	7	10	20	31	28	17	14
CP01 - M30 - 120	6	9	14	23	32	32	18	15

Typical noise reduction 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)	D (mm)	Weight (kg)
CP01 - M30 - 030	298	401	35	300	6
CP01 - M30 - 060	298	401	35	600	11
CP01 - M30 - 090	298	401	35	900	15
CP01 - M30 - 120	298	401	35	1200	20



## CP01 - M31 Silencer

Available in four standard lengths, M-Series Silencers have excellent attenuation properties, achieved with sound absorbing infill retained in the attenuator casing by a perforated galvanised steel liner.

- Fits directly into 100mm diameter ducting
- Standard lengths 300, 600, 900 & 1200mm
- Use up to 70°C (standard construction)
- Systems up to 1000 Pascals
- Special lengths on request



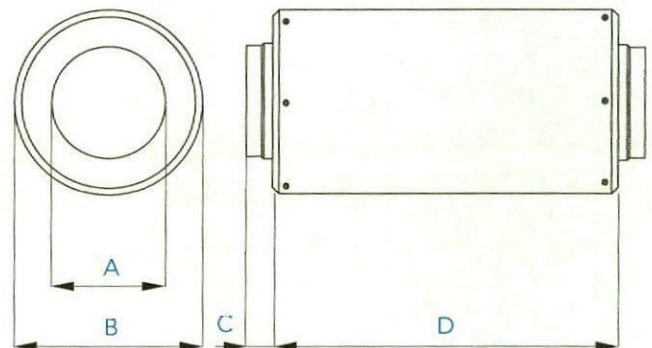
## Typical Noise Reduction (dB) - Centre Band Frequency

Product Code	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
CP01 - M31 - 030	1	3	6	12	15	18	16	8
CP01 - M31 - 060	3	5	8	16	21	22	16	14
CP01 - M31 - 090	4	7	10	20	31	28	17	14
CP01 - M31 - 120	6	9	14	23	32	32	18	15

Typical noise reduction 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)	D (mm)	Weight (kg)
CP01 - M31 - 030	313	418	35	300	6
CP01 - M31 - 060	313	418	35	600	11
CP01 - M31 - 090	313	418	35	900	15
CP01 - M31 - 120	313	418	35	1200	20



## CP01 - M35 Silencer

Available in four standard lengths, M-Series Silencers have excellent attenuation properties, achieved with sound absorbing infill retained in the attenuator casing by a perforated galvanised steel liner.

- Fits directly into 100mm diameter ducting
- Standard lengths 300, 600, 900 & 1200mm
- Use up to 70°C (standard construction)
- Systems up to 1000 Pascals
- Special lengths on request



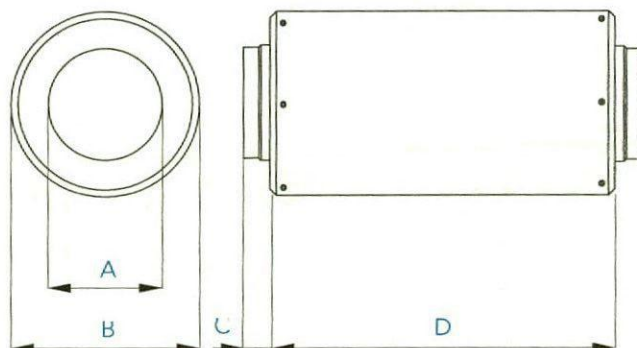
## Typical Noise Reduction (dB) - Centre Band Frequency

Product Code	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
CP01 - M35 - 030	1	3	6	12	15	18	16	8
CP01 - M35 - 060	3	5	8	16	21	22	16	14
CP01 - M35 - 090	4	7	10	20	31	28	17	14
CP01 - M35 - 120	6	9	14	23	32	32	18	15

Typical noise reduction 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)	D (mm)	Weight (kg)
CP01 - M35 - 030	353	458	35	300	7
CP01 - M35 - 060	353	458	35	600	12
CP01 - M35 - 090	353	458	35	900	18
CP01 - M35 - 120	353	458	35	1200	23



## CP01 - M40 Silencer

Available in four standard lengths, M-Series Silencers have excellent attenuation properties, achieved with sound absorbing infill retained in the attenuator casing by a perforated galvanised steel liner.

- Fits directly into 100mm diameter ducting
- Standard lengths 300, 600, 900 & 1200mm
- Use up to 70°C (standard construction)
- Systems up to 1000 Pascals
- Special lengths on request



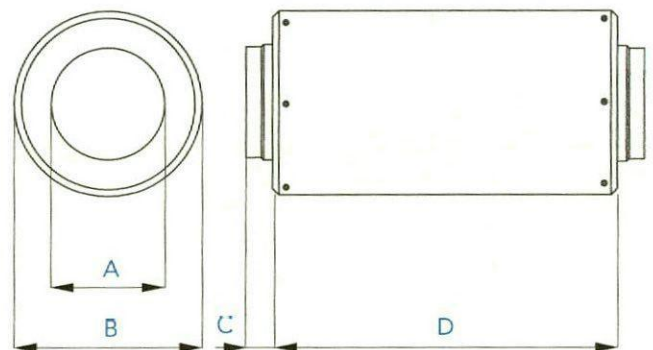
## Typical Noise Reduction (dB) - Centre Band Frequency

Product Code	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
CP01 - M40 - 030	1	2	4	11	15	15	12	8
CP01 - M40 - 060	2	4	7	14	17	18	14	11
CP01 - M40 - 090	3	6	9	18	26	23	15	12
CP01 - M40 - 120	5	8	13	22	30	27	17	12

Typical noise reduction 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)	D (mm)	Weight (kg)
CP01 - M40 - 030	398	502	35	300	7
CP01 - M40 - 060	398	502	35	600	12
CP01 - M40 - 090	398	502	35	900	18
CP01 - M40 - 120	398	502	35	1200	23



## CP01 - M45 Silencer

Available in four standard lengths, M-Series Silencers have excellent attenuation properties, achieved with sound absorbing infill retained in the attenuator casing by a perforated galvanised steel liner.

- Fits directly into 100mm diameter ducting
- Standard lengths 300, 600, 900 & 1200mm
- Use up to 70°C (standard construction)
- Systems up to 1000 Pascals
- Special lengths on request



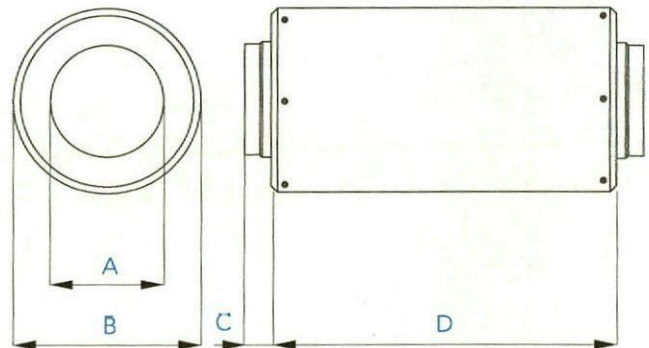
## Typical Noise Reduction (dB) - Centre Band Frequency

Product Code	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
CP01 - M45 - 030	1	1	4	10	14	15	12	7
CP01 - M45 - 060	2	4	6	14	16	16	13	11
CP01 - M45 - 090	3	6	8	17	24	21	15	11
CP01 - M45 - 120	4	8	13	20	29	25	16	11

Typical noise reduction 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)	D (mm)	Weight (kg)
CP01 - M45 - 030	448	552	35	300	8
CP01 - M45 - 060	448	552	35	600	15
CP01 - M45 - 090	448	552	35	900	22
CP01 - M45 - 120	448	552	35	1200	32



## CP01 - M50 Silencer

Available in four standard lengths, M-Series Silencers have excellent attenuation properties, achieved with sound absorbing infill retained in the attenuator casing by a perforated galvanised steel liner.

- Fits directly into 100mm diameter ducting
- Standard lengths 300, 600, 900 & 1200mm
- Use up to 70°C (standard construction)
- Systems up to 1000 Pascals
- Special lengths on request



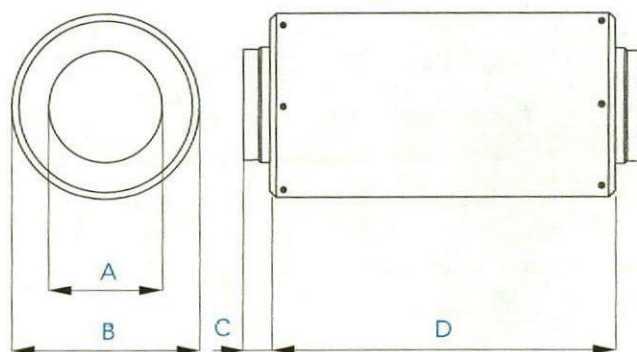
## Typical Noise Reduction (dB) - Centre Band Frequency

Product Code	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
CP01 - M50 - 030	1	1	3	10	14	14	11	7
CP01 - M50 - 060	2	4	6	14	16	16	13	11
CP01 - M50 - 090	3	6	8	17	24	21	15	11
CP01 - M50 - 120	4	8	12	19	28	23	16	12

Typical noise reduction 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)	D (mm)	Weight (kg)
CP01 - M50 - 030	498	602	35	300	9
CP01 - M50 - 060	498	602	35	600	16
CP01 - M50 - 090	498	602	35	900	24
CP01 - M50 - 120	498	602	35	1200	32



## 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 M Series Silencers are fitted with a perforated liner manufactured from galvanised mild steel conforming to EN10327 (BS2989). The M Series Silencers utilise acoustic grade mineral fibre absorbing in-fill 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** CP01 - M10 - 030. **CP01** Product group code.

**M10** Diameter code (10 = 100mm). **030** Length code (030 = 300mm)

## 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
<b>Centrifugal Fans</b>	Direct couple only at the same size; use an inlet cone if open after silencer.
<b>Axial Fans</b>	Direct couple only at the same size. Use an inlet cone if open after silencer.
<b>Mixed Flow Fans</b>	Direct couple only at the same size. Use an inlet cone if open after silencer.
<b>Ductwork Bends</b>	Direct couple only at the same size.
<b>Ductwork Reducers</b>	Direct couple only with reducers of maximum 15° cheek slope.
<b>Finned Coils &amp; Filters</b>	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.

## MUB/T-S 062 500D4

Centrifugal box fan, 120°C continuous, insulated

Item Number: [235447](#)

Variant: 400V 3~ 50Hz

- Inline airflow direction
- Up to 120°C medium temperature, continuous operation
- use, e.g. for kitchen exhaust air
- Pre-mounted isolator is standard
- Low sound level
- High efficient motors
- Integral cold conductor (PTC)
- Easy to maintain and reliable
- Motor outside the air stream

All MUB/T-S fans have new optimized and high efficient HD impellers with backward curved blades, manufactured from aluminium. The fans are equipped with IEC standard motors outside the air stream. Optimum motor protection by cold conductors (PTC) to be connected to an external motor protection device. The casing consists of an aluminium frame with fibreglass reinforced plastic corners and double skin, galvanised steel panels with a 30 mm mineral wool insulation. With quick lock access door. The MUB/T-S bottom panel is a drain tray and incorporates a pre-mounted 1" drain plug. An additional pre-wired isolator switch is mounted on the casing.



### Technical parameters

#### Nominal data

Voltage (nominal)	400	V
Frequency	50	Hz
Phase(s)	3~	
Input power	1,825	W
Input current	3.48	A
Impeller speed	1,455	rpm
Air flow	max 2.8173	m³/s
Temperature of transported air	max 120	°C
Max temperature of transported air, when speed controlled	120	°C

#### Protection/Classification

Enclosure class, motor	IP55
Insulation class	F

#### Dimensions and weights

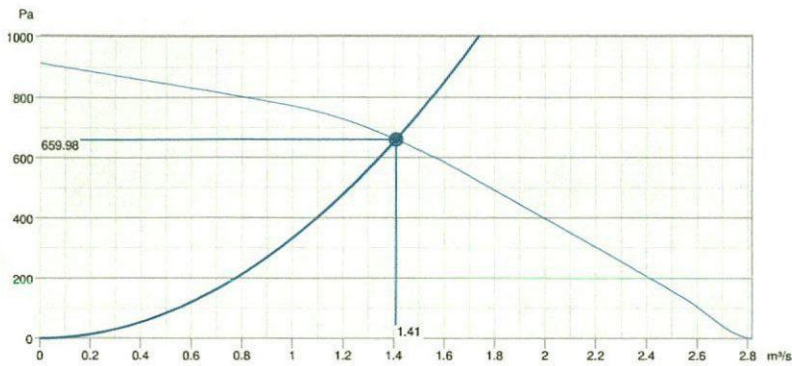
Weight	104	kg
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#### Others

Motor type	AC
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## Performance

### Performance curve



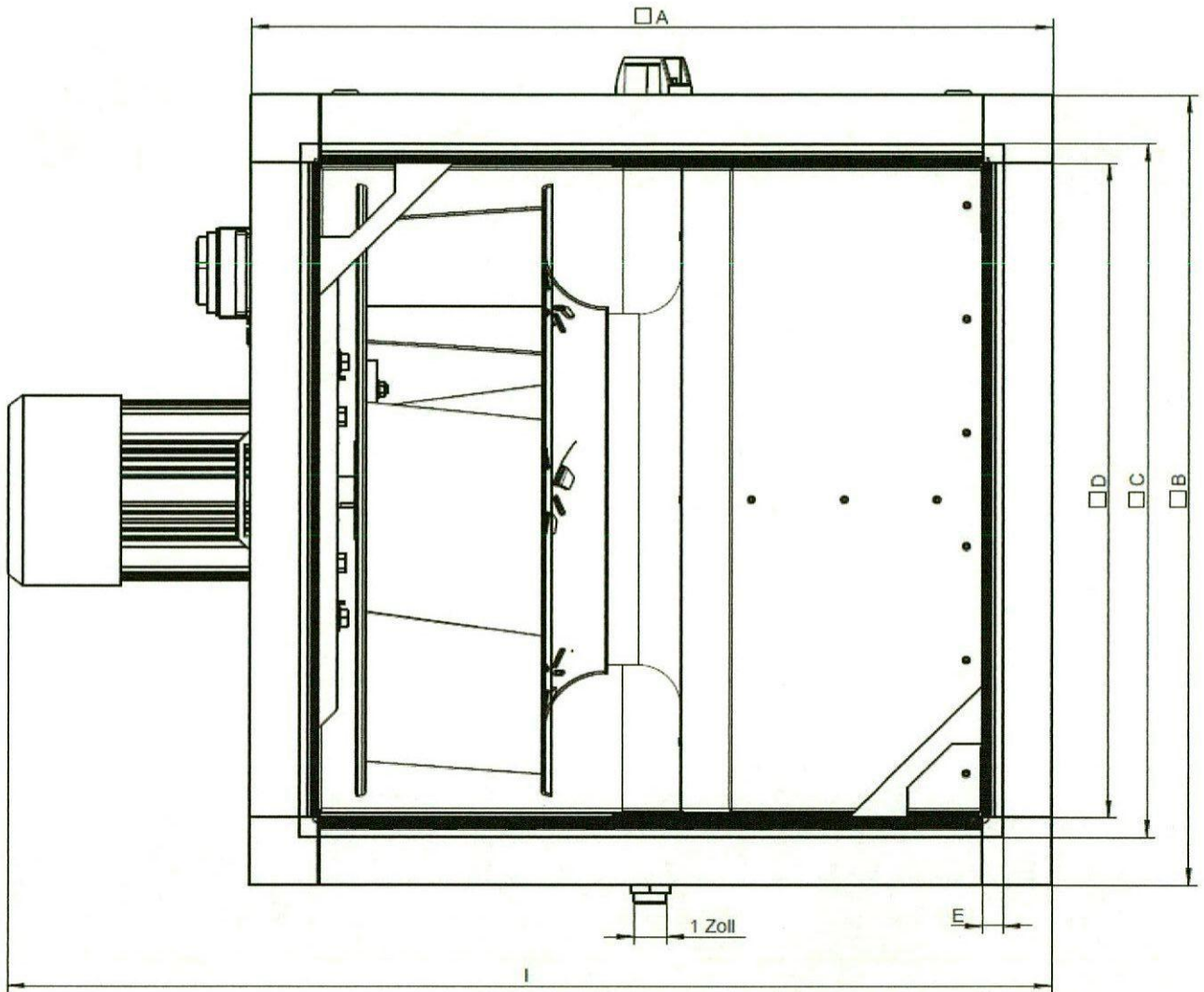
### Hydraulic data

Required air flow	1.41 m <sup>3</sup> /s
Required static pressure	660 Pa
Working air flow	1.41 m <sup>3</sup> /s
Working static pressure	660 Pa
Air density	1.204 kg/m <sup>3</sup>
Power	1793.2 W
Fan control - RPM	1454 rpm
Current	3.45 A
SFP	1.273 kW/m <sup>3</sup> /s
Control voltage	400.0 V
Supply voltage	400 V

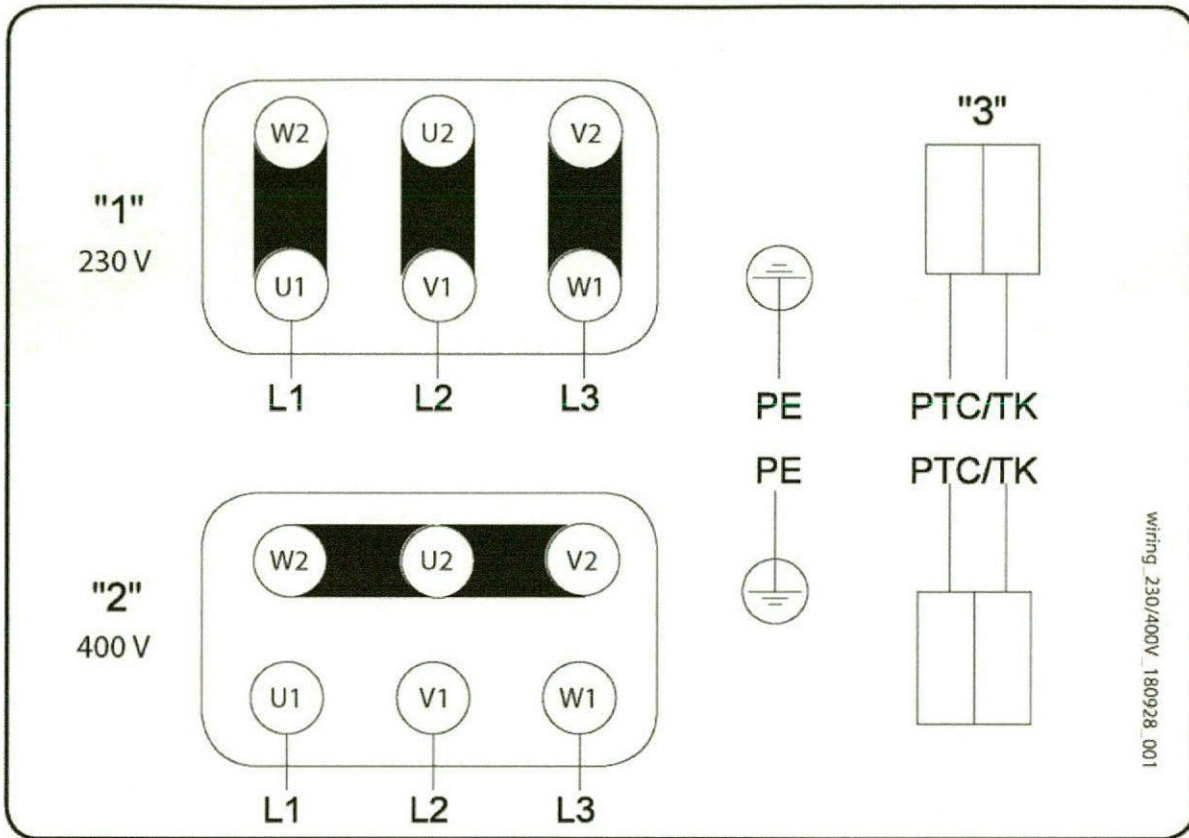
Sound power level		63	125	250	500	1k	2k	4k	8k	Total
Inlet	dB(A)	50	74	77	79	80	77	74	66	85
Outlet	dB(A)	52	76	78	81	81	79	75	67	87
Surrounding	dB(A)	30	58	49	47	50	49	41	30	60
Sound pressure level at 3m (20m <sup>2</sup> Sabine)	dB(A)	-	-	-	-	-	-	-	-	53
Sound pressure level at 3m free field	dB(A)	-	-	-	-	-	-	-	-	39

## Dimension

MUB/T-S 062	□A	□B	□C	□D	E	I
500D4 IE3	820	820	720	678	21	1034



## Wiring



Wiring 230/400V 180928 001

- 1                    3 x 230V Delta Connection
- 2                    3 x 400V Star connection
- 3                    PTC / TK
- Changing of direction of rotation by interchanging of two phases

## Acoustic

The Level of Casing-Breakout-Noise depends on the quality of shielding the acoustic inlet and outlet noises.

The shown Level of Casing-Breakout-Noise will be reached only in case of 100 % shielding the acoustic inlet and outlet noise and a correspondingly low environment noise.

## Accessories

- FGV 062/716-716 flex. conn. (4198)
- FRQ5-4A+LED V2 (36229)
- FRQS-4A V2 (36231)
- SD-MUB Vibration pad set (37324)
- U-EK230E Motor protection (30199)
- UGS 062/630 adapter flex. (4358)
- WSD MUB/T-S large (37496)
- FGV 062/716-716 flex. 120°C (38362)
- CCM outlet MUB062 d630 (311681)
- CCMI outlet 062 d630 KIT 30mm (239096)
- KKF 30 062-filter-section (93312)
- KKF-CAR 062-filter-section (277347)
- KKF-KITCHEN 062-filter-section (277364)
- KKS 062 silencer-section (276852)
- FRQ-4A V2 (36227)
- FRQ5S-4A+LED V2 (36233)
- FXDM5AM Frequency inv. IP54 (31387)
- TUNE-AHU-DE008-062-718x718-M0 (79882)
- UGS 062/500 adapter flex 120°C (38370)
- WSD 062 (860x860x70) complete (31482)
- WSG 062 MUB/T complete (36067)
- CCM outlet MUB062 d560 (311684)
- CCMI outlet 062 d560 KIT 30mm (239095)
- GRU 062 base frame h= 100mm (276662)
- KKF-ALU 062-filter-section (376816)
- KKF-CAR 100-filter-section (277348)
- KKF-KITCHEN 100-filter-section (277367)

## Documents

- imo\_mub\_all\_010\_en\_248056
- UKCA DECLARATION OF CONFORMITY\_THERMOFANS\_EN\_002.PDF
- COMMISSIONING REPORT\_FANS\_160628\_EN\_001.PDF

# Suspended Mounts



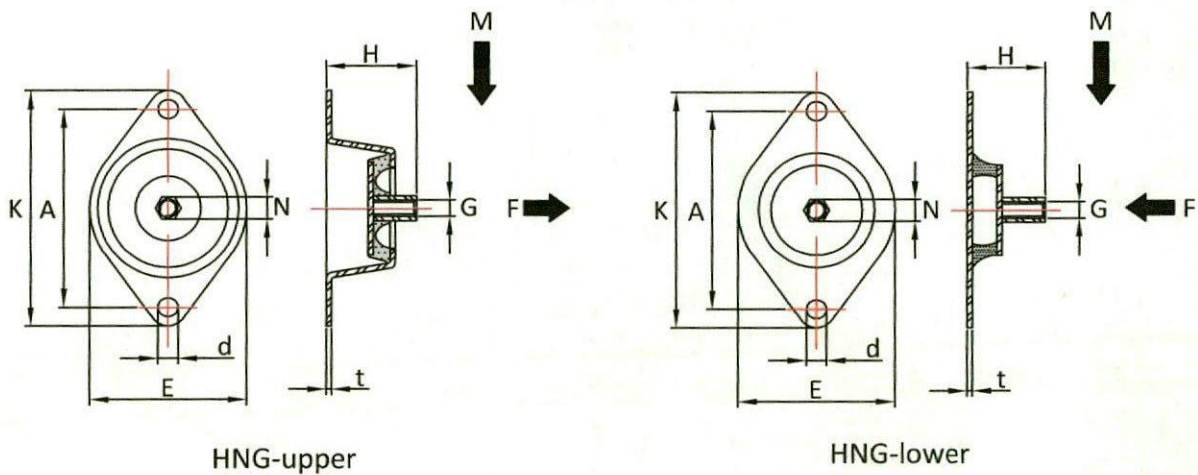
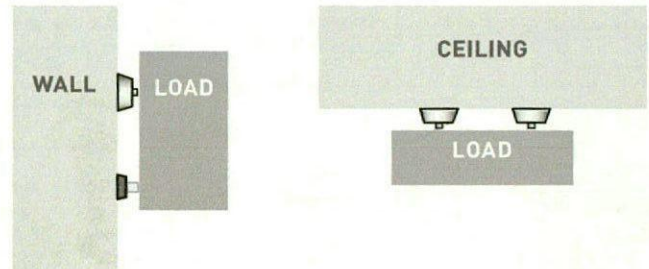
The Suspended Mountings are ideal for hanging or suspending equipment from walls, vertical surfaces, ceilings or supporting structures. The HNG Upper is used to accommodate tensile mounted loads at the top fixing of the equipment, whilst the HNG Lower is used to accommodate the compressive loads at the bottom of the equipment.

## Advantages:

- Fail Safe Design
- Easy to Install
- Suspends from Ceilings & Walls

## Applications:

- HVAC
- Ducting and Pipework
- Instrument Cabinets
- Control panels



HNG-upper

HNG-lower

TYPE	E	K	A	H	d	N	t	G
HNG-upper	75	114	96	33	9	15	2.5	M8
HNG-lower	75	114	96	33	9	15	2.5	M8

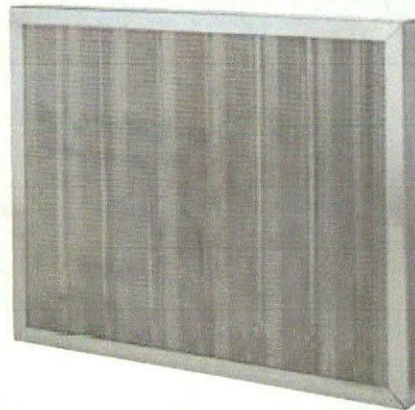
TYPE	M-Max (KG)		F-Max (KG)	
	40° Sh	60° Sh	40° Sh	60° Sh
HNG-upper	14	25	30	70
HNG-lower	14	25	30	70

Max compression load in Kg deflection in mm.

This information is for guidance only. Customers are recommended to contact us for further technical information on products and applications. We reserve the right to alter specifications or withdraw products without notice.

# LONGAR® Type 2 HE75

## High Performance 75% Grease Efficiency Baffle Filter



### LONGAR® TYPE 2 HE75 HIGH PERFORMANCE BAFFLE FILTER FEATURES:

- High Performance Baffle Filter 75% Grease efficiency at 8 micron
- 100% Flame barrier protection to DIN 18869-5
- Cutsafe safety edges
- Fully welded construction – all stainless steel construction
- Meets insurance requirements
- Meets HVCA DW172 requirements
- Folding handles and drain holes as standard
- Robust baffle filter construction – built to last
- Tested & certified to European standard DIN 18869-5
- Tested to American standard UL1046
- Tested & certified to ASTM 2519

### APPLICATIONS

- Commercial kitchens
- Water mist separation
- Spark arrestors
- Sand filtration
- Grease filtration

### LONGAR® TYPE 2 HE75 HIGH PERFORMANCE BAFFLE FILTERS

For use in commercial kitchens and ventilation to extract grease laden air and act as a fire barrier. LONGAR® Type 2 HE75 is a positive flame barrier having been tested to European DIN Standard 18869-5 & American 1046 & ASTM2519.

The LONGAR® TYPE 2 HE75 is developed for customers who wish to extract more grease from the air stream, following prolonged R&D we have designed a baffle filter with a micro screen on the exit to increase grease extraction.

The result of this is a retrofit baffle filter that removes 75% of the grease at 8 microns. Tested to ASTM2519 this product significantly reduces duct cleaning, saving customers expenditure on ongoing cleaning costs.

Conventional baffle filters extract grease in the region of 20 to 35% efficiency at 8 microns depending on the product design, the HE75 offers over twice the extraction rate.

### CONSTRUCTION / MATERIAL SPECIFICATION

As standard all baffles are manufactured with Stainless Steel 430 polished finish, (other finishes and materials are available). Maximum operating temperature 400C or 750F.

### FITTING INSTRUCTIONS

- Fit products, handles in direction of air in
- Product vertical in air stream

### HANDLING

- Handle with care when unpacking
- Store in dry and frost protected place

For technical specifications, part numbers and ordering information, please see overleaf.

### MAINTENANCE

- All maintenance should be carried out in accordance with the planned maintenance set by installation contractor
- When handling any components suitable PPE should be used - gloves, eye protection and access equipment
- Filters should be cleaned by a trained operative either daily for heavy use or weekly for light use
- For more exact guide to cleaning you should contact a cleaning specialist

### PACKAGING

All units are packaged in double wall boxes with separators for standard sizes, glued closed for protection whilst in transit against contamination.

### FILTER CLASSIFICATION:

- Filter Class G2
- UL Class 2

### TESTED TO:

- DIN 18869-5
- UL 1046
- ASTM 2519

### MANUFACTURED TO:

- DW172
- ISO9001

# LONGAR® Type 2 HE75

## High Performance 75% Grease Efficiency Baffle Filter

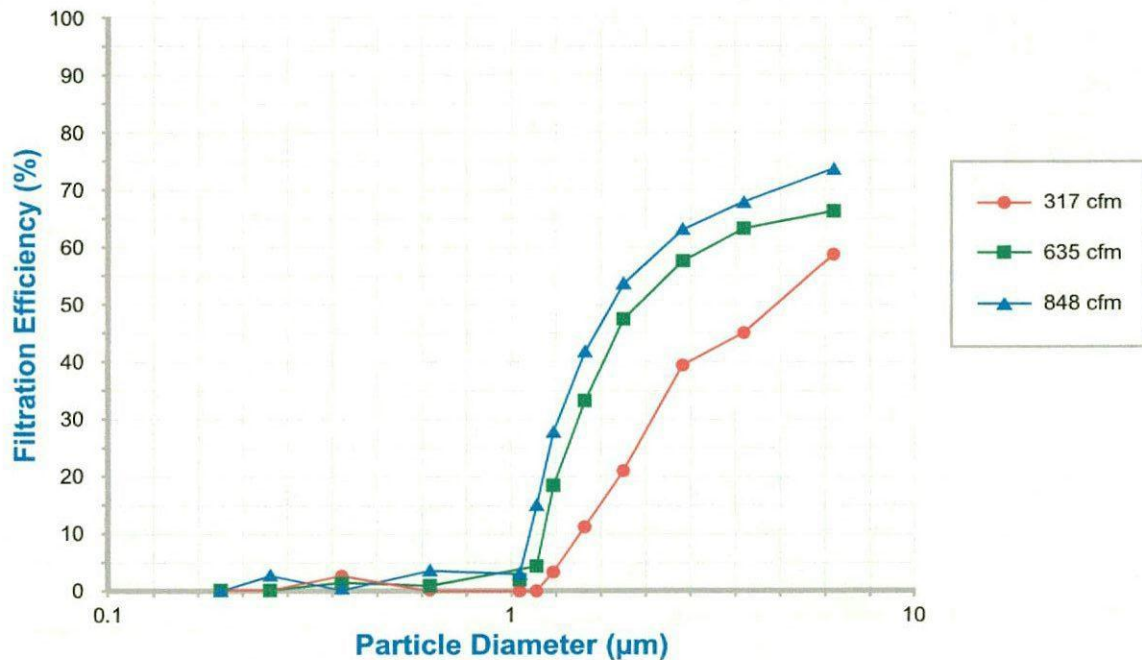
### TECHNICAL SPECIFICATIONS

Longar specifies the baffle filter as height x width x thickness. The handles are fixed to the height and drain holes punched on the width. The length of the baffle blade is the height; please ensure correct orientation is given when ordering.

SIZE ORDERING GUIDE (TOLERANCES +/- 2mm)				
Part Number	Actual Size HxWxD	Nominal Size HxWxD	Weight	Filter Free Area
TYPE2ST16X20X2	395 x 496 x 45mm	406 x 508 x 50mm	1.96kgs	0.13m <sup>2</sup>
	15.55 x 19.53 x 1.77"	16 x 20 x 2"	4.31lbs	1.40ft <sup>2</sup>
TYPE2ST20X20X2	496 x 496 x 45mm	508 x 508 x 50mm	2.41kgs	0.16m <sup>2</sup>
	19.53 x 19.53 x 1.77"	20 x 20 x 2"	5.30lbs	1.76ft <sup>2</sup>

FINAL RECOMMENDED PRESSURE DROP: 400 PASCALS

### ASTM-2519 TEST RESULTS: LONGAR Type 2 HE75 High Performance Baffle Filter - 495x495x45



### LONGAR® TYPE 2 HE75 HIGH PERFORMANCE BAFFLE FILTERS SIZE: 496(H)X496(W)X45(D)MM

Resistance to Airflow:

Airflow (m <sup>3</sup> /s)	Airflow cfm	Air Velocity (fpm)	Air Velocity (m/s)	Resistance (in. H <sub>2</sub> O)	Resistance (Pa)
0.075	159	57	0.290	0.04	9
0.112	238	86	0.435	0.09	22
0.150	317	114	0.580	0.16	41
0.150	318	114	0.581	0.16	41
0.187	396	143	0.725	0.26	64
0.200	424	153	0.775	0.30	74
0.225	476	171	0.871	0.37	93
0.300	635	229	1.161	0.68	168
0.300	636	229	1.163	0.68	168
0.375	794	286	1.452	1.07	265
0.400	848	305	1.551	1.22	304
0.500	1060	382	1.939	1.92	479



**LONGAR INDUSTRIES**

FILTERS AND FABRICATIONS FOR A CLEANER ENVIRONMENT

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 T +44 (0)1264 332 993 F +44 (0)1264 332 994 E info@longarind.com W www.longarind.com

As part of our program for continuous improvement, Longar Ltd reserves the right to change specifications without notice. 15-01-2016.

# OC Innovations – OC2 TEST

Oxidation using ozone and activated oxygen ions is used to treat odour emissions from commercial and industrial kitchen processes (DEFRA, 2005: Guidance on the Control of Odour and Noise from Commercial Kitchen Exhaust Systems).

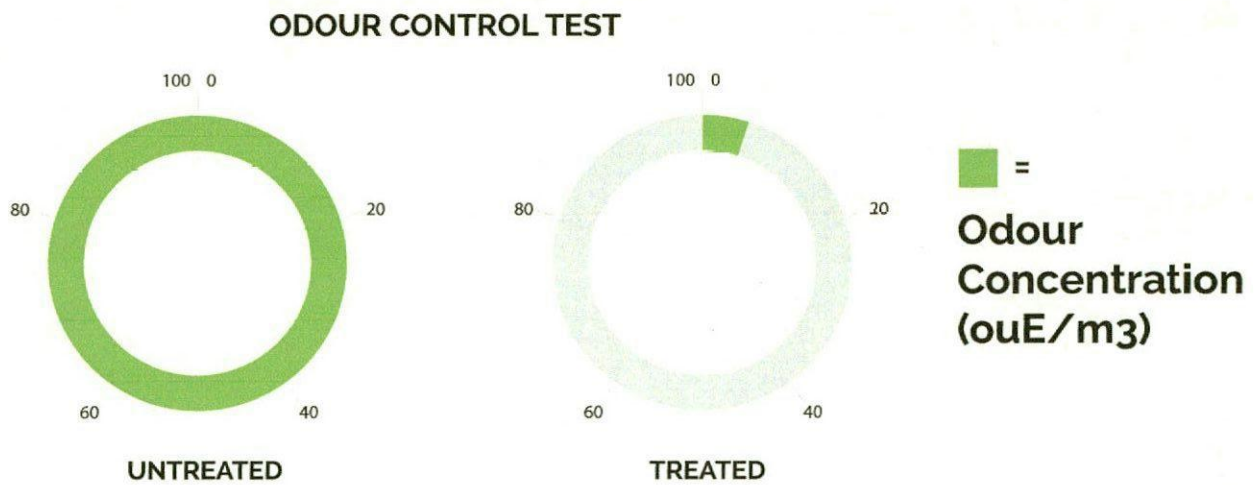
The OC2 has been specifically designed for use in commercial kitchens. The system injects ozone into the kitchen extraction canopy where it reacts with odours, which are oxidized in a chemical reaction, which results in the production of carbon dioxide and water vapour. The ozone itself is consumed during the process and is converted back into oxygen.

## Testing Procedure

Independent tests were carried out using olfactometry. A number of individual contaminated air samples were taken and then examined.

During the tests foods with the following cooking odours (fish, garlic, onions, curry spices, bacon, burgers, various fried foods) were used in order to provide a varied and accurate results with both, with and without treatment with an OC2 unit.

Air samples which were treated with the OC2 unit, produced an **odour reduction** of up to **95%**, for clear and easy to understand results we have shown this in terms of the graph/chart below.



## OC INNOVATIONS - OC2 (SPECIFICATIONS)

### Technical Information

Ozone Output	24g/hr ozone output
Housing dimensions	300mm wide x 300mm length x 150mm height
Housing material	Stainless Steel powder coated white/grey
Duct work connection	100mm circular
Volume flow rate in ductwork	Up to 2m <sup>3</sup> /s per unit, subject to cooking odours.
Air residence time inside chamber	>0.1 seconds
Pressure drop	N/A
Weight of unit	5Kg approx.
Two individual Light Indicators	Green Power On / Green Ozone On
Electrical requirements	240V / 1 ph / 50/60Hz
Power requirements	168W
Safety	Built in Air pressure switch

### Installation

It is recommended to locate the units with an injection point located closest to the source of odours (i.e. Canopy plenum or nearest accessible point on ductwork, in order to maximize dwell time. In any case the dwell time must be no less than 1 second.

The units in built air pressure switch is activated by the installation of the black three pinned connector to the unit to the sensor lock connector.

### Maintenance

An optional service contract is available which entails a yearly inspection of the unit. Please contact us for further information and pricing.

## OC INNOVATIONS - OC2

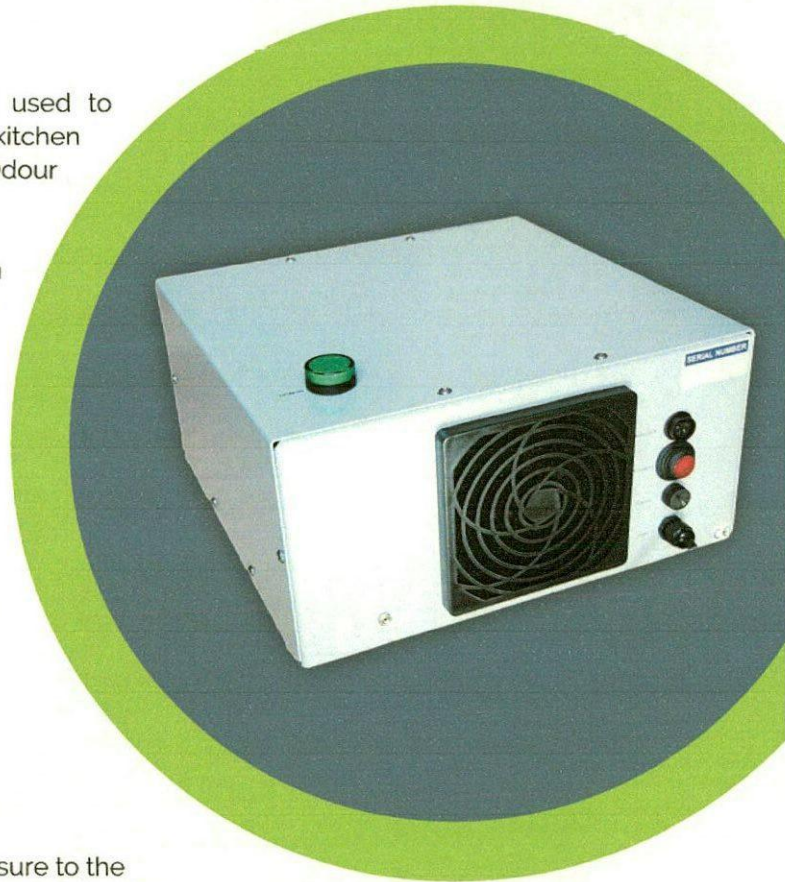
### Process Information

Oxidation using ozone and activated oxygen ions is used to treat odour emissions from commercial and industrial kitchen processes (DEFRA, 2005: Guidance on the Control of Odour and Noise from Commercial Kitchen Exhaust Systems).

The OC2 has been specifically designed for use in commercial kitchens. The system injects ozone into the kitchen extraction canopy or associated duct work where it reacts with odours, which are oxidized in a chemical reaction, which results in the production of carbon dioxide and water vapour. The ozone itself is consumed during the process and is converted back into oxygen.

### The benefits of purchasing an OC2 unit over traditional UV/Ozone systems are as follows:

- Compact, lightweight and quiet operation so is less obtrusive
- Quick and easy low cost installation
- Low capital and running costs – up to 50% less than traditional UVC systems
- Injection into ductwork – adding negligible back pressure to the system so requiring less energy to push air through the air handling system. This means less ductwork modifications
- The OC2 maintains efficiency as they remain outside of the air stream, they also require less maintenance and require less cleaning.
- Tested to EN13725:2003, CE Approved



**Spec sheet overleaf >**

