

# Euroflex™ 120

## Vinyl Coated Flexible Ducting



**Traditional style flexible ducting giving a rugged, economical flexible duct with an exceptional fire integrity**

**Heavy duty vinyl coated fibreglass fabric with high mechanical strength**

**Independently tested to BS 476 pt. 20; fire integrity of 76 mins**

**Independently tested to BS 476 pt. 7; Class 1 material**

**Independently tested to BS 476 pt. 6; Propagation index 1:3, Sub index h: 2**

**Six metre standard length for convenience and economy**

**Sizes range from 50 to 600mm nominal bore diameter.**

### Application Data

The installation of air conditioning and mechanical ventilation systems may affect the fire risk within a building. The extent and detail of statutory control and other specialist interests varies according to the design, use, occupation and location of the building and the type of air conditioning or ventilation system proposed. It is essential that all appropriate authorities be fully consulted at an early stage (e.g. District Surveyor, Superintending Architect, Fire Department, etc.)

Where air distribution systems pass through various sections of a building they may provide a ready path for the spread of smoke and fire. The designer should ensure that wherever practicable the materials specified for the system should be non-combustible or difficult to ignite and possess a good rating of surface spread of flame when tested in accordance with the appropriate parts of BS476. In addition, such materials should not generate smoke or toxic fumes when subjected to fire or heat. The suitability of many materials will need to be agreed by the enforcing authority. Since there is no published list of acceptable materials the designer or installer may be required to provide authoritative test data for the products it is intended to use.

Codes of Practice and Regulations dealing with fire safety aspects of ventilation systems frequently refer to flexible joints and connections:

### Flexible Joints

Flexible joints are normally provided to prevent vibration and /or allow for thermal movements in the system and should not exceed 300mm in length.

### Flexible Connections

Flexible connections are normally provided at the extremities of the ductwork system to facilitate site connections to grilles, diffusers, air boxes and combined air/light fixtures, mixing boxes and terminal units. Such connectors are nearly always provided for by the use of factory manufactured circular flexible ducting.

Various types are available, since airflow/pressure drop characteristics, acoustic and thermal properties may all be important to system design. From the fire safety viewpoint BSCP 413:1973 recommends that flexible connections should not exceed 3.7 m in length and should not pass through fire-resisting walls, floors or partitions.

**Euroflex Type 120 coated flexible fibreglass ducting has been independently tested at Warrington Research Centre as defined by BS476.**

## Vinyl Coated Flexible ducting

### Fire Test Data

In BSCP 413:1973 it is recommended that for flexible (ducting) connections the materials of construction should preferably be noncombustible; alternatively:

i when tested in accordance with the propagation test in BS 476 Part 6, should have an index of performance not exceeding 12, of which not more than 6 should derive from the initial period of the test.

ii when involved in a fire should generate a minimum amount of smoke and toxic gases.

In practice, flexible ducting is tested to BS476 Parts 7 & 8 and should satisfy the requirements in (ii).

BS476 Part 7 deals with surface spread of flame test for materials and provides a method of classification according to the rate and distance of spread of flame across them (Class 1 limits flame spread to 165mm in 11/2 minutes). BS476 Part 8 provides a method of assessing the 'integrity'f (time resistance of fire penetration) of flexible ducting connections.

In BSCP 413 flexible joints are required to have a resistance to the penetration of fire of at least 15 minutes when tested in accordance with BS 476 Part 8 and should be constructed of material rated Class 1 in the surface spread of flame test in BS 476 without treatment and should not give off excessive quantities of smoke when burnt. In the absence of other criteria, many enforcing Authorities appear to use this as a guideline to the required fire performance of flexible connections.

### Product Range

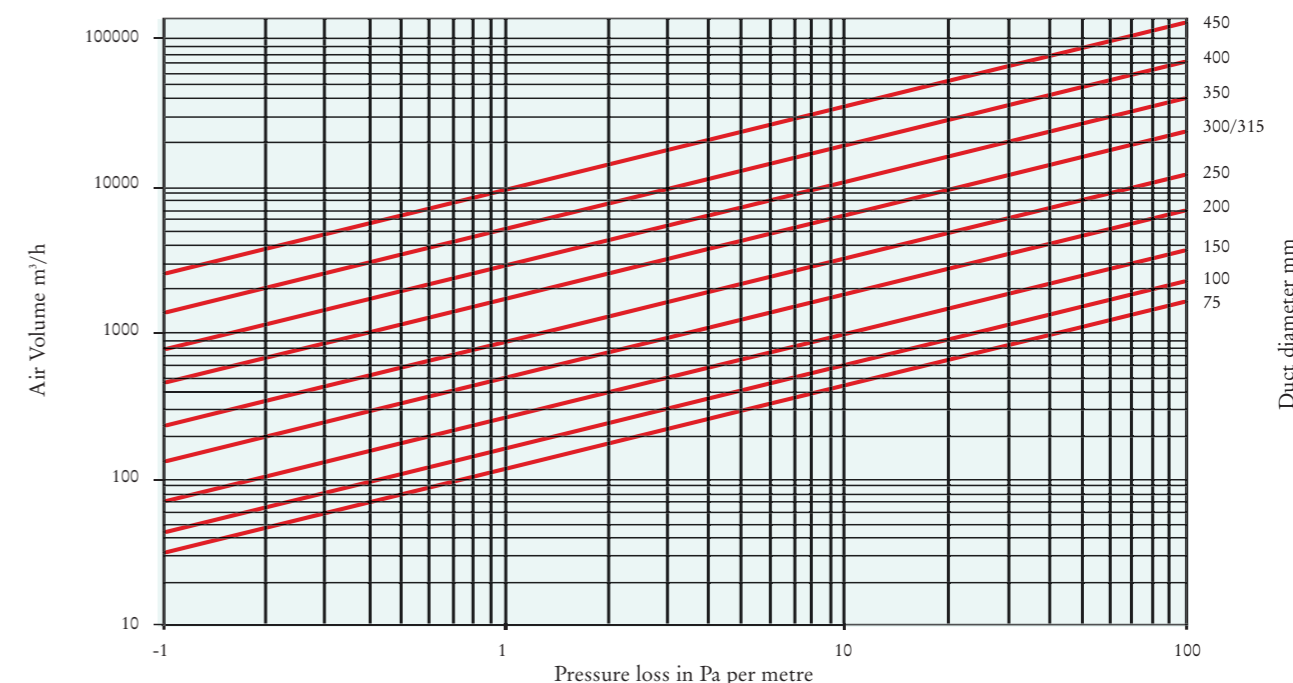
Nominal Bore		Code No
Ins	mm	
2	50	12900051
3	75	12903076
4	100	12904102
–	114	12900114
5	125	12905127
6	150	12906152
–	160	12900160
7	175	12907180
8	200	12908203
9	225	12909229
10	250	12910254
12	300	12912305
–	315	12900315
14	350	12914356
16	400	12916406
18	450	12918456
20	500	12920508
22	550	12922556
24	600	12924608

### Specifications

Vinyl coated fibreglass fabric supported by a coated spring steel wire helix.

Colour: grey  
 Operating temperature: -5°C to +93°C  
 Working pressure: -240Pa to +2450Pa  
 Standard length: 6.0m  
 Minimum bend radius: 0.6 x diameter

### Pressure Loss Graph



# Euroflex™ 130

## Aluminium Flexible Ducting



**Super compressible flexible ducting constructed from multiple layer aluminium laminate**

**Ten metre length – compresses to 0.7m individually packaged**

**High tensile steel helix offers excellent resistance to crushing**

**Independently tested to BS 476 pt, 20; fire integrity of 39mins**

**Independently tested to BS 476 pt, 7; Class D1 material**

**Sizes range from 75 to 315mm nominal bore diameter.**

### Application Data

The installation of air conditioning and mechanical ventilation systems may affect the fire risk within a building. The extent and detail of statutory control and other specialist interests varies according to the design, use, occupation and location of the building and the type of air conditioning or ventilation system proposed. It is essential that all appropriate authorities be fully consulted at an early stage (e.g. District Surveyor, Superintending Architect, Fire Department, etc.).

Where air distribution systems pass through various sections of a building they may provide a ready path for the spread of smoke and fire. The designer should ensure that wherever practicable the materials specified for the system should be non-combustible or difficult to ignite and possess a good rating of surface spread of flame when tested in accordance with the appropriate parts of BS476. In addition, such materials should not generate smoke or toxic fumes when subjected to fire or heat. The suitability of many materials will need to be agreed by the enforcing authority. Since there is no published list of acceptable materials the designer or installer may be required to provide authoritative test data for the products it is intended to use.

Codes of Practice and Regulations dealing with fire safety aspects of ventilation systems frequently refer to flexible joints and connections:

### Flexible Joints

Flexible joints are normally provided to prevent vibration and /or allow for thermal movements in the system and should not exceed 300mm in length.

### Flexible Connections

Flexible connections are normally provided at the extremities of the ductwork system to facilitate site connections to grilles, diffusers, air boxes and combined air/light fixtures, mixing boxes and terminal units. Such connectors are nearly always provided for by the use of factory manufactured circular flexible ducting.

Various types are available, since airflow/pressure drop characteristics, acoustic and thermal properties may all be important to system design. From the fire safety viewpoint BSCP 413:1973 recommends that flexible connections should not exceed 3.7m in length and should not pass through fire-resisting walls, floors or partitions.

**Euroflex Type 130 has been independently tested at Warrington Research Centre as defined by BS 476.**

## Aluminium Flexible Ducting

### Fire Test Data

In BSCP 413:1973 it is recommended that for flexible (ducting) connections the materials of construction should preferably be noncombustible; alternatively:

- i when tested in accordance with the propagation test in BS476 Part 6, should have an index of performance not exceeding 12, of which not more than 6 should derive from the initial period of the test.
- ii when involved in a fire should generate a minimum amount of smoke and toxic gases.

In practice, flexible ducting is tested to BS476 Parts 7 & 8 and should satisfy the requirements in (ii).

BS476 Part 7 deals with surface spread of flame test for materials and provides a method of classification according to the rate and distance of spread of flame across them (Class 1 limits flame spread to 165mm in 11/2 minutes). BS476 Part 8 provides a method of assessing the 'integrity' (time resistance of fire penetration) of flexible ducting connections.

In BSCP 413 flexible joints are required to have a resistance to the penetration of fire of at least 15 minutes when tested in accordance with BS 476 Part 8 and should be constructed of material rated Class 1 in the surface spread of flame test in BS 476 without treatment and should not give off excessive quantities of smoke when burnt. In the absence of other criteria, many enforcing Authorities appear to use this as a guideline to the required fire performance of flexible connections.

### Product Range

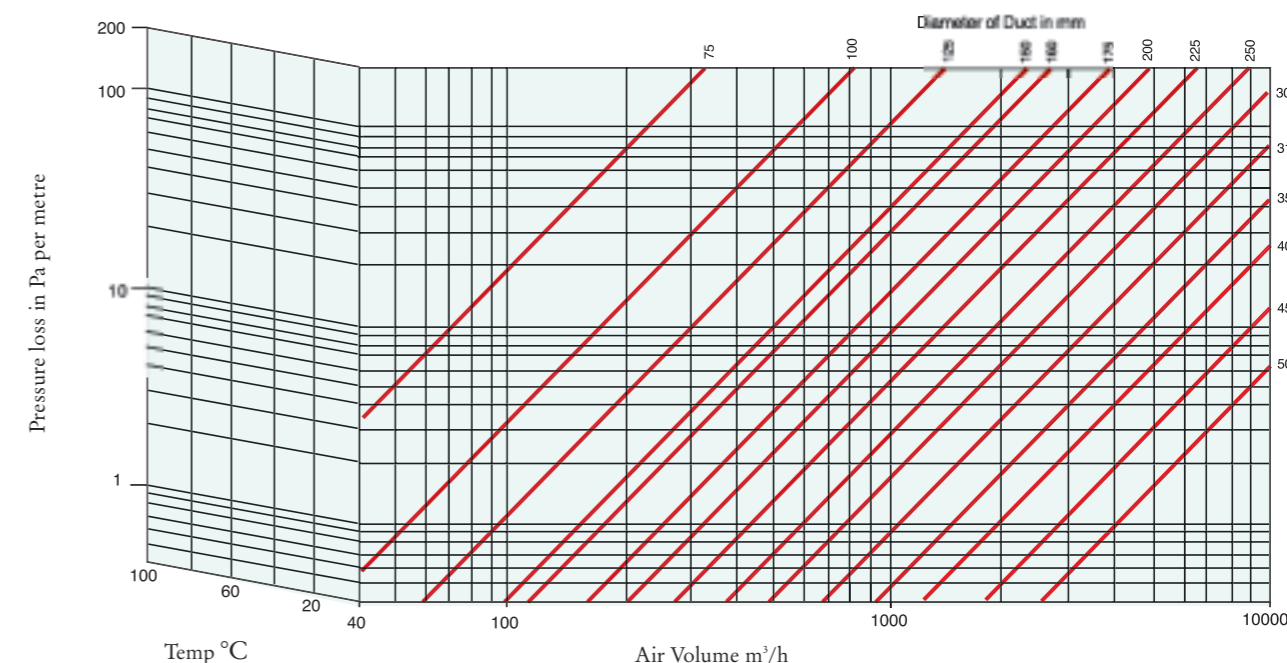
Nominal Bore		
Ins	mm	Code No
3	75	13903076
4	100	13904102
5	125	13905127
6	150	13906152
–	160	13900160
7	175	13907180
8	200	13908203
9	225	13909229
10	250	13910254
12	300	13912305
–	315	13900315

### Specifications

Aluminium, flexible duct, constructed from a multiple layer laminate, based on aluminium/polyester/ aluminium enclosing and supported by a high tensile continuous steel helix.

- Operating temperature: -20°C to +120°C
- Extended length: 10 metres
- Compressed length: 0.7m
- Working pressure: Up to 2450Pa
- Minimum bend radius: 0.6 x diameter

### Pressure Loss Graph



# Euroflex™ 150

## Multiple Layered Aluminium Flexible Ducting



**Super compressible flexible duct constructed from multiple layer aluminium laminate with fibreglass scrim reinforcement**

**Ten metre length – compresses to 0.7m individually packaged**

**Extremely robust construction offers exceptional resistance to crushing and sagging**

**Independently tested to BS 476 pt, 20; fire integrity of 41mins**

**Sizes range from 75 to 600mm nominal bore diameter.**

### Application Data

The installation of air conditioning and mechanical ventilation systems may affect the fire risk within a building. The extent and detail of statutory control and other specialist interests varies according to the design, use, occupation and location of the building and the type of air conditioning or ventilation system proposed. It is essential that all appropriate authorities be fully consulted at an early stage (e.g. District Surveyor, Superintending Architect, Fire Department, etc.).

Where air distribution systems pass through various sections of a building they may provide a ready path for the spread of smoke and fire. The designer should ensure that wherever practicable the materials specified for the system should be non-combustible or difficult to ignite and possess a good rating of surface spread of flame when tested in accordance with the appropriate parts of BS476. In addition, such materials should not generate smoke or toxic fumes when subjected to fire or heat. The suitability of many materials will need to be agreed by the enforcing authority. Since there is no published list of acceptable materials the designer or installer may be required to provide authoritative test data for the products it is intended to use.

Codes of Practice and Regulations dealing with fire safety aspects of ventilation systems frequently refer to flexible joints and connections:

### Flexible Joints

Flexible joints are normally provided to prevent vibration and /or allow for thermal movements in the system and should not exceed 300mm in length.

### Flexible Connections

Flexible connections are normally provided at the extremities of the ductwork system to facilitate site connections to grilles, diffusers, air boxes and combined air/light fixtures, mixing boxes and terminal units. Such connectors are nearly always provided for by the use of factory manufactured circular flexible ducting.

Various types are available, since airflow/pressure drop characteristics, acoustic and thermal properties may all be important to system design. From the fire safety viewpoint BSCP 413:1973 recommends that flexible connections should not exceed 3.7 m in length and should not pass through fire-resisting walls, floors or partitions.

**Euroflex Type 150 has been independently tested at Warrington Research Centre as defined by BS 476.**

## Multiple Layered Aluminium Flexible Ducting

### Fire Test Data

In BSCP 413:1973 it is recommended that for flexible (ducting) connections the materials of construction should preferably be noncombustible; alternatively:

i when tested in accordance with the propagation test in BS 476 Part 6, should have an index of performance not exceeding 12, of which not more than 6 should derive from the initial period of the test.

ii when involved in a fire should generate a minimum amount of smoke and toxic gases.

In practice, flexible ducting is tested to BS476 Parts 7 & 8 and should satisfy the requirements in (ii).

BS476 Part 7 deals with surface spread of flame test for materials and provides a method of classification according to the rate and distance of spread of flame across them (Class 1 limits flame spread to 165mm in 11/2 minutes). BS476 Part 8 provides a method of assessing the 'integrity' (time resistance of fire penetration) of flexible ducting connections.

In BSCP 413 flexible joints are required to have a resistance to the penetration of fire of at least 15 minutes when tested in accordance with BS 476 Part 8 and should be constructed of material rated Class 1 in the surface spread of flame test in BS 476 without treatment and should not give off excessive quantities of smoke when burnt. In the absence of other criteria, many enforcing Authorities appear to use this as a guideline to the required fire performance of flexible connections.

### Product Range

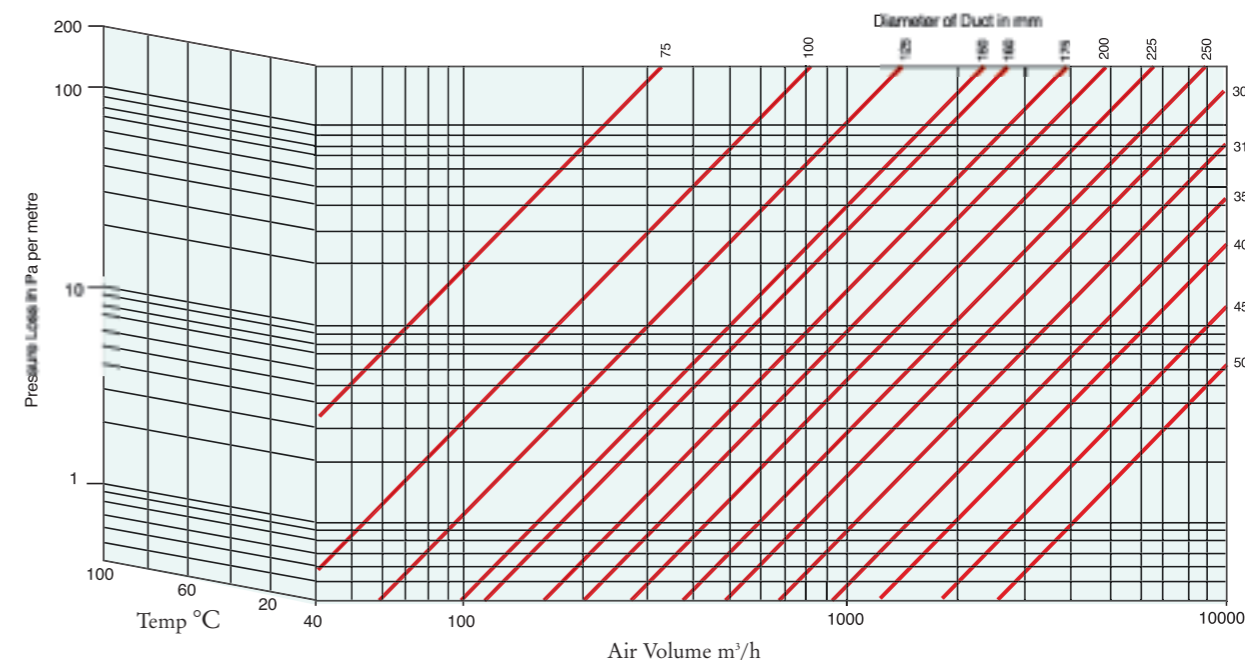
Nominal Bore		Code No
Ins	mm	
3	75	15903076
4	100	15904102
5	125	15905127
6	150	15906152
–	160	15900160
7	175	15907180
8	200	15908203
9	225	15909229
10	250	15910254
12	300	15912305
–	315	15900315
14	350	15914356
16	400	15916406
18	450	15918456
20	500	15920508
22	550	15922556
24	600	15924608

### Specifications

Super compressible, aluminium, flexible duct, constructed from a multiple layer laminate, based on aluminium/polyester/aluminium with fibreglass scrim reinforcement. Enclosing and supported by a high tensile continuous steel helix.

Operating temperature: -20°C to +120°C  
 Extended length: 10 metres  
 Compressed length: 1.4m  
 Working pressure: Up to 2450Pa  
 Minimum Bend Radius: 0.6 x diameter

### Pressure Loss Graph



# Euroflex™ 200

## Thermal Flexible Ducting



**Pre-installed flexible duct with 25mm high density fibreglass insulation and scrim reinforced aluminium laminate vapour barrier**

**10 metre length – compresses to 1.4m individually packaged**

**Independently tested to BS 476 pt, 20; fire integrity of 27 mins**

**Independently tested to BS 476 pt, 7; Class D1 material**

**Independently tested to BS 476 pt, 6; Propagation index 1: 8.1, Sub index h: 5.1**

**Size range from 75 to 500mm nominal bore diameter.**

### Application Data

The installation of air conditioning and mechanical ventilation systems may affect the fire risk within a building. The extent and detail of statutory control and other specialist interests varies according to the design, use, occupation and location of the building and the type of air conditioning or ventilation system proposed. It is essential that all appropriate authorities be fully consulted at an early stage (e.g. District Surveyor, Superintending Architect, Fire Department, etc.).

Where air distribution systems pass through various sections of a building they may provide a ready path for the spread of smoke and fire. The designer should ensure that wherever practicable the materials specified for the system should be non-combustible or difficult to ignite and possess a good rating of surface spread of flame when tested in accordance with the appropriate parts of BS476. In addition, such materials should not generate smoke or toxic fumes when subjected to fire or heat. The suitability of many materials will need to be agreed by the enforcing authority. Since there is no published list of acceptable materials the designer or installer may be required to provide authoritative test data for the products it is intended to use.

Codes of Practice and Regulations dealing with fire safety aspects of ventilation systems frequently refer to flexible joints and connections:

### Flexible Joints

Flexible joints are normally provided to prevent vibration and/or allow for thermal movements in the system and should not exceed 300mm in length.

### Flexible Connections

Flexible connections are normally provided at the extremities of the ductwork system to facilitate site connections to grilles, diffusers, air boxes and combined air/light fixtures, mixing boxes and terminal units. Such connectors are nearly always provided for by the use of factory manufactured circular flexible ducting.

Various types are available, since airflow/pressure drop characteristics, acoustic and thermal properties may all be important to system design. From the fire safety viewpoint BSCP 413:1973 recommends that flexible connections should not exceed 3.7 m in length and should not pass through fire-resisting walls, floors or partitions.

**Euroflex Thermal Type 200 has been independently tested at Warrington Research Centre as defined by BS 476.**

## Thermal Flexible Ducting

### Fire Test Data

In BSCP 413:1973 it is recommended that for flexible (ducting) connections the materials of construction should preferably be noncombustible; alternatively:

i when tested in accordance with the propagation test in BS 476 Part 6, should have an index of performance not exceeding 12, of which not more than 6 should derive from the initial period of the test.

ii when involved in a fire should generate a minimum amount of smoke and toxic gases.

In practice, flexible ducting is tested to BS476 Parts 7 & 8 and should satisfy the requirements in (ii).

BS476 Part 7 deals with surface spread of flame test for materials and provides a method of classification according to the rate and distance of spread of flame across them (Class 1 limits flame spread to 165mm in 11/2 minutes). BS476 Part 8 provides a method of assessing the 'integrity' (time resistance of fire penetration) of flexible ducting connections.

In BSCP 413 flexible joints are required to have a resistance to the penetration of fire of at least 15 minutes when tested in accordance with BS 476 Part 8 and should be constructed of material rated Class 1 in the surface spread of flame test in BS 476 without treatment and should not give off excessive quantities of smoke when burnt. In the absence of other criteria, many enforcing Authorities appear to use this as a guideline to the required fire performance of flexible connections.

### Product Range

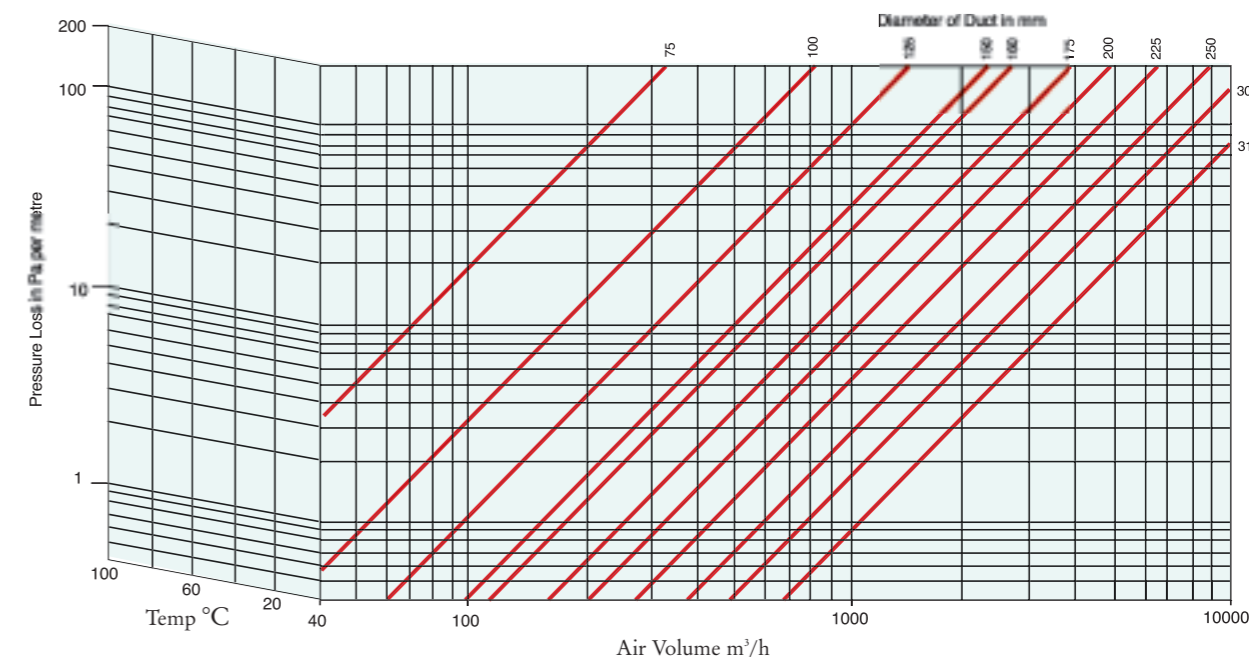
Nominal Bore		Code No
Ins	mm	
3	75	20903076
4	100	20904102
5	125	20905127
6	150	20906152
–	160	20900160
7	175	20907180
8	200	20908203
9	225	20909229
10	250	20910254
12	300	20912305
–	315	20900315
14	350	20914356
16	400	20916406
18	450	20918456
20	500	20920508

### Specifications

Insulated aluminium duct, Euroflex Super inner core with a uniform layer of fibreglass insulation and tough outer jacket of reinforced aluminium laminate acting as a vapour barrier.

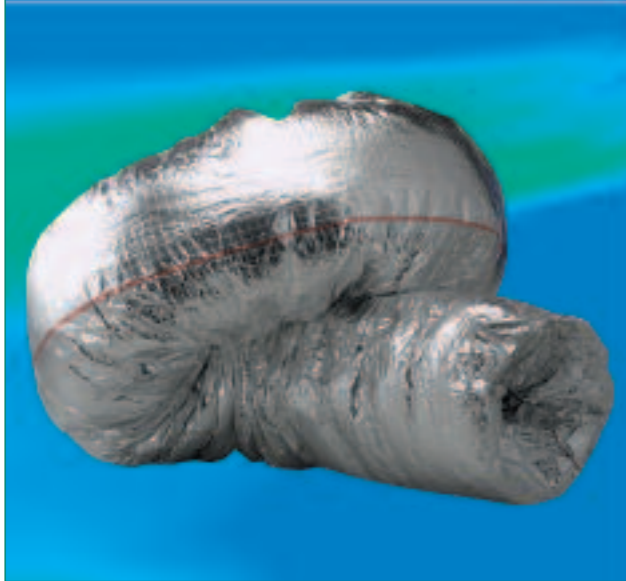
Operating temperature: -20°C to +120°C  
 Extended length: 10 metres  
 Compressed length: 1.4m  
 Working pressure: Up to 2450Pa  
 Minimum Bend Radius: 0.6 x diameter +0.085m

### Pressure Loss Graph



# Euroflex™ 350

## Acoustic Flexible Ducting



Specifically designed for noise attenuation giving exceptional insertion loss over a wide frequency spectrum

Six metre standard length

Independently tested to bs 476 pt. 7; class d1 aluminium vapour barrier material

Sizes range from 75 to 500mm nominal bore diameter

### Application Data

There are several aspects to be considered when addressing the problem of noise (simply defined as unwanted sound in air movement systems). The first and most important point is that close attention to predicted noise levels at the system design stage will prove far more cost effective than attempts to eliminate noise once the system has been installed. Euroflex Type 350 Acoustic has been specifically designed to provide a quick and effective solution to the problems of noise transmission into and from ventilated areas.

### Specifications

Pre-insulated fibreglass skim inner duct with a uniform layer of fibreglass insulation all enclosed by a reinforced aluminium laminate vapour barrier.

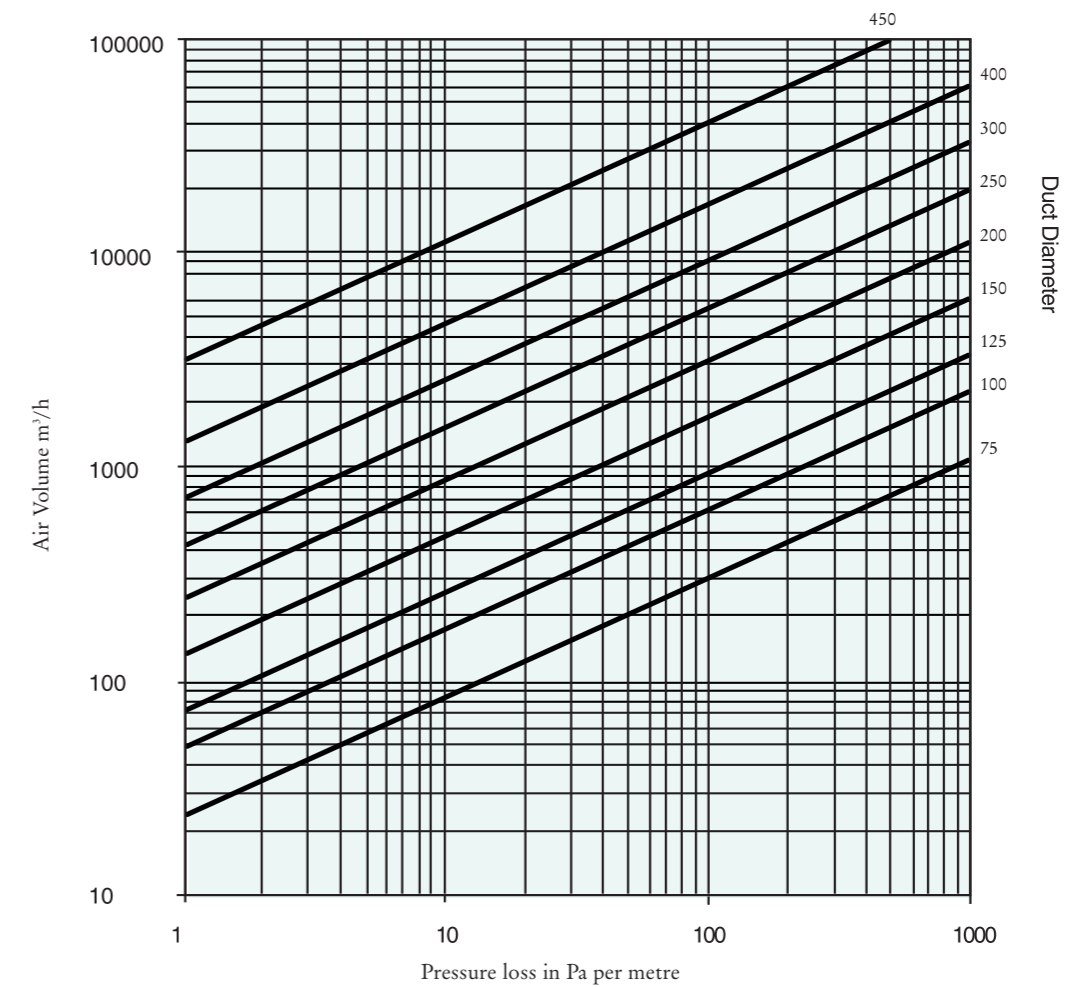
Operating temperature: -20°C to +140°C  
 Extended length: 6 metres  
 Working pressure: Up to 2450Pa  
 Minimum Bend Radius: 0.65 x diameter +0.06m

### Insertion Loss/Metre

Flexible Diameter Inside mm	Attenuation Loss Across Sound Spectrum Hz							
	63	125	250	500	1K	2K	4K	8K
75 – 100	4	12	16	30	30	30	30	25
125 – 175	3	7	9	20	20	19	18	17
200 – 225	2	5	7	15	16	15	14	13
250 – 350	2	4	5	10	12	11	10	9
400 – 500	1	3	3	7	8	8	7	6

## Acoustic Flexible Ducting

### Pressure Loss Graph

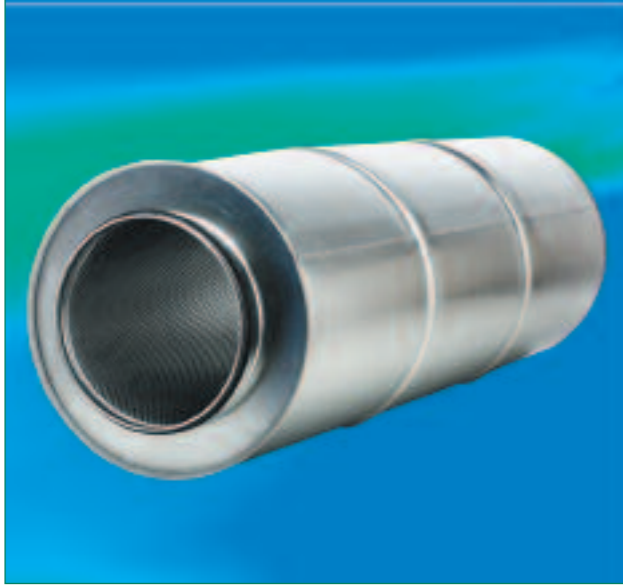


### Product Range

Nominal Bore		
Ins	mm	Code No
3	75	35903076
4	100	35904102
5	125	35905127
6	150	35906152
-	160	35900160
7	175	35907180
8	200	35908203
9	225	35909229
10	250	35910254
12	300	35912305
-	315	35900315
14	350	35914356
16	400	35916406
18	450	35918456
20	500	35920508

# Sonex

## Circular Sound Attenuators



**Low cost – exceptional performance, ex-stock availability**

**Sheet steel casing and end plates. 30 minute fire rating as standard (60 minute available)**

**Fitted spigot for direct connection to circular ductwork**

**Patented 'plug-in' seal fitting**

### Application Data

The effective and economic solution for sound attenuation in circular duct systems from 100 to 500mm diameter. With at least three models per size throughout the range the system designer is given complete flexibility of choice allowing a selection which is the best balance of attenuation, size and cost for any application.

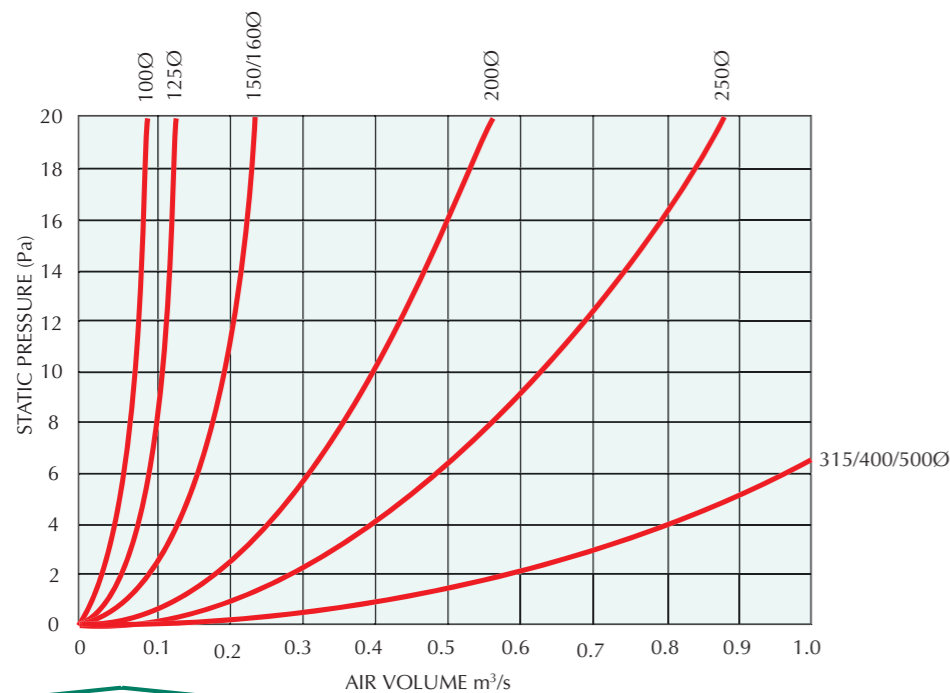
Sonex Attenuators are fitted with a patented duct seal which enables leak free 'plug-in' connection to rigid ductwork with consequent savings of installation costs. The excellent attenuation characteristics of the Sonex range are achieved without imposing undue system resistance. Pressure losses are little more than those which would occur over a comparable section of straight duct.

Developed and refined in one of the most modern and comprehensively equipped facilities in Europe. Production samples are regularly re-tested at these same laboratories and we guarantee that Sonex Attenuators will perform to stated figures as a minimum.

### Construction

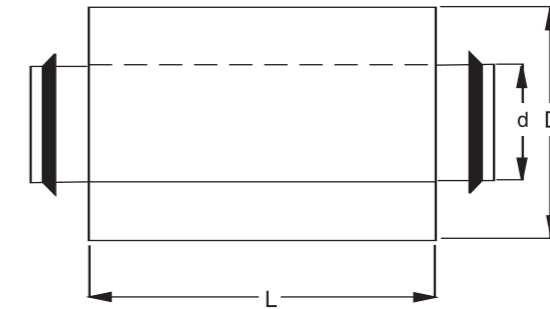
The attenuator consists of a perforated tubular liner manufactured from sheet steel. The liner is enclosed by a thick layer of mineral wool sound absorbing material. Casing and end plates are formed from galvanised sheet steel. Standard models have a 30 minute fire rating (60 minutes also available).

### Pressure Loss Graph



## Circular Sound Attenuators

### Insertion Loss, Dimensions & Weights



Code No	Attenuation dB mid Frequency Hz								Dimensions (mm)			Weight kg.
	63	125	250	500	1K	2K	4K	8k	d	D	L	
83010030	3	3	9	17	23	26	25	13	100	200	300	2.5
83010060	6	9	15	34	40	40	37	18	100	200	600	4
83010090	10	13	21	40	45	39	36	16	100	200	900	7
83012030	3	3	7	16	20	24	22	17	125	225	300	3.5
83012060	5	8	13	29	35	35	32	22	125	225	600	4.5
83012090	10	12	19	37	40	38	34	32	125	225	900	8
83015030	3	3	6	13	19	23	22	16	150*	260	300	4
83015060	5	7	12	24	30	35	31	20	150*	260	600	6
83015090	8	10	15	32	38	37	34	29	150*	260	900	9
83020060	4	6	10	20	27	33	19	17	200	300	600	7.5
83020090	8	9	14	28	32	35	28	25	200	300	900	11
83020120	10	12	17	36	41	43	28	26	200	300	1200	14
83025060	4	5	10	19	25	29	18	17	250	355	600	10
83025090	6	7	12	23	30	30	22	19	250	355	900	14.5
83025120	8	10	15	32	37	38	26	20	250	355	1200	18
83031060	4	5	8	15	20	22	17	15	315	400	600	13
83031090	5	7	10	20	30	29	18	16	315	400	900	17.5
83031120	7	9	13	22	32	33	19	18	315	400	1200	21
83040090	3	5	9	19	26	20	13	11	400	606	900	38
83040120	6	8	14	24	30	28	17	9	400	606	1200	50
83050090	3	4	9	15	23	17	12	11	500	711	900	43
83050120	5	7	13	18	26	23	15	9	500	711	1200	60

\* Also available with a 160 dia spigot

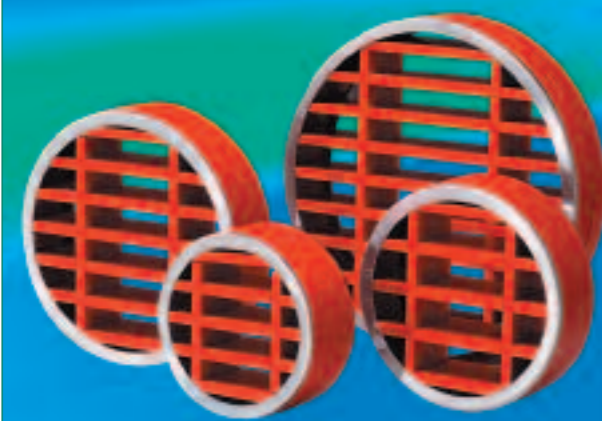
Sonex Attenuators can be economically applied in even the smallest system. The table gives selection data on attenuators suitable for use with the smaller fan system or for attenuation on branch ductwork. Full technical details on the complete range are available on request.

Nominal Duct Dia.*	For Normal Attenuation	For Medium Attenuation	For High Attenuation
4"	010-030	010-060	010-090
5"	012-030	012-060	012-090
6"	015-030	015-060	015-090
8"	020-060	020-090	020-120
10"	025-060	025-090	025-120
12.3"	031-060	031-090	031-120
16"	–	040-090	031-120
20"	–	050-090	050-120

\* See Detailed Dimension table above

# Pyrocheck

## Intumescent Fire Dampers



Suitable for air transfer in doors and partitions

Complete seal achieved in approximately five minutes when tested in accordance with BS 476 pt. 20 & 22

Available in rectangular or circular form

UV Stabilised material. UPVC

Pyrocheck offer much lower resistance to airflow compared to traditional designs

Independently tested to BS 476 pt. 22; fire integrity of 66 (rectangular)/ 68 mins (circular). 2 hour rating also available

Pyrocheck CVT Intumescent Fire Dampers are available in rectangular or circular form and have a minimum fire integrity of one hour (in accordance with BS476 Part 8 1972). The fire dampers have been independently tested at the Warrington Fire Research Centre.

Intumescent fire dampers require no mechanical or external device to operate as they rely solely on an internal reaction initiated by heat. They are, therefore, especially suitable for applications where regular inspection is unlikely or difficult or where mechanical devices would be susceptible to shock or corrosion damage.

Typical applications are air transfer in fire doors or partitions. The active material is encased in a uPVC sleeve giving maximum protection against moulds, fungi, insect attack or

similar biological damage, and may reasonably be expected to last for the life of the building. Unaffected by UV light, capable of withstanding freeze/thaw cycling and able to support ambient temperatures within the range -10°C to +80°C.

In a fire situation Pyrocheck CVT Dampers will rapidly expand to completely block the duct or opening thus preventing the further passage of smoke and hot gasses.

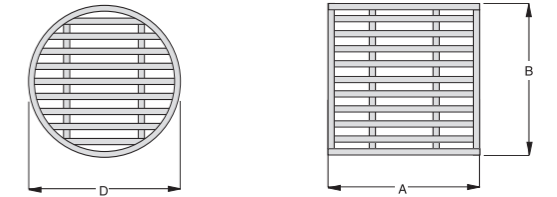
An unusually high free area means that Pyrocheck CVT Dampers offer much lower resistance to air flow compared to traditional intumescent designs.

## Intumescent Fire Dampers

### Dimensions (mm)

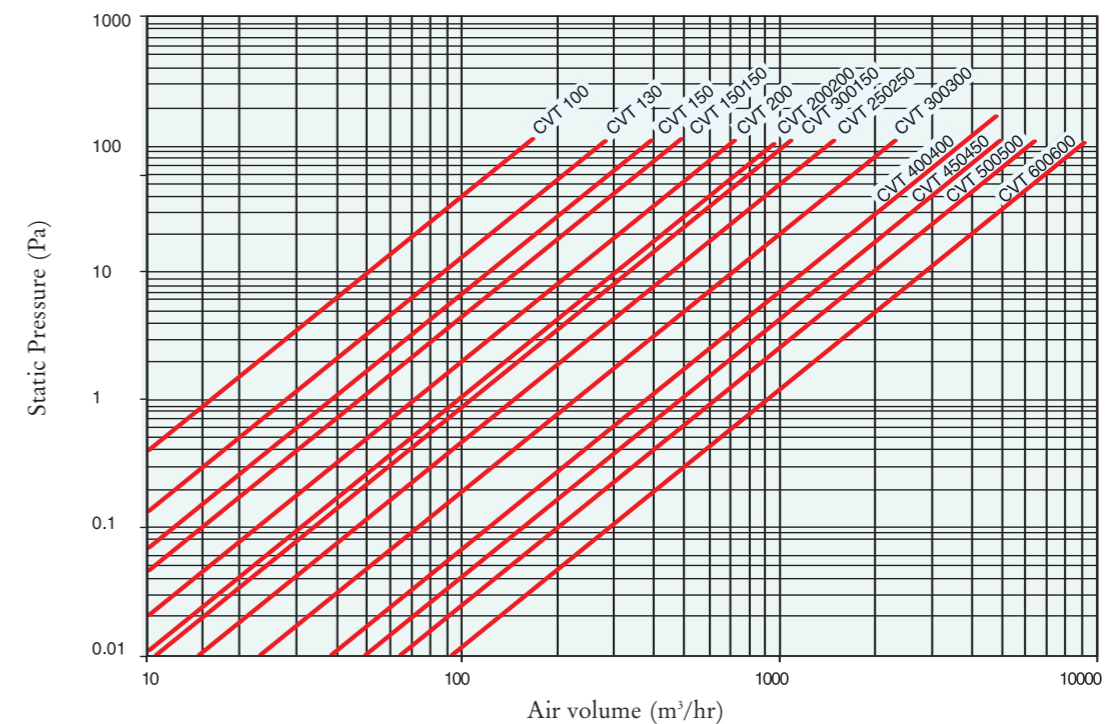
Code No	D	A	B	MATCHING TRANSFER GRILLE
CVT 100	100	-	-	-
CVT 130	125	-	-	-
CVT 150	150	-	-	-
CVT 200	198	-	-	-
CVT 250	248	-	-	-
CVT 300	298	-	-	-
CVT 100100	-	100	100	33G0404
CVT 150150	-	150	150	33G0606
CVT 200200	-	200	200	33G0808
CVT 250250	-	250	250	33G1010
CVT 300300	-	300	300	33G1212
CVT 350350	-	350	350	33G1414
CVT 400400	-	400	400	33G1616
CVT 450450	-	450	450	33G1818
CVT 500500	-	500	500	33G2020
CVT 600600	-	600	600	33G2424

### Pyrocheck Circular Pyrocheck Rectangular



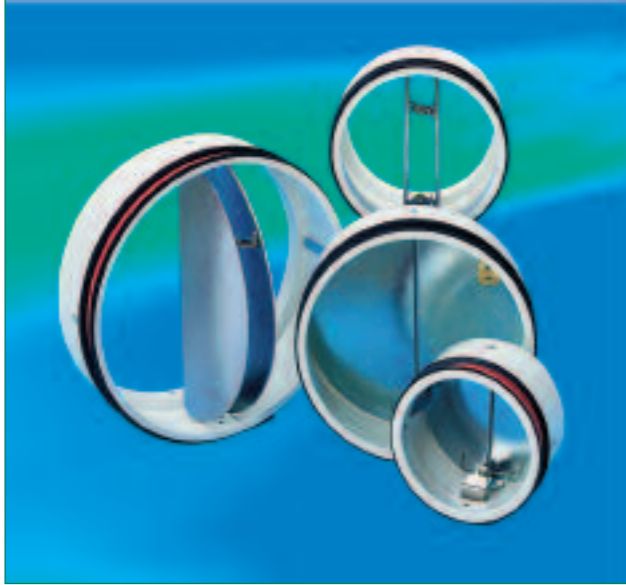
Matching pressed steel transfer grilles finished in epoxy white are available to suit rectangular models.

### Pressure Loss Graph



# Pyrocheck

## Fusible Link Fire Dampers



Suitable for installation in ducts, walls and ceilings

Four hour tested to BS476 Part 20

High shut-off twin blade design

Low cost solution for small diameter ducts

Complete with gasket for in-duct mounting

Low pressure drop and noise generation

Blade locking springs

Pyrocheck Series PA fire dampers can be mounted horizontally, vertically without effect on their operation.

The design of Pyrocheck Series PA presents minimal obstruction to the air flow during normal operation (prior to initiation), consequently the pressure drop across the damper is extremely low.

The precision low mass fusible link is set to operate at 72°C. Operation of the fusible link releases the blades and completely blocks the duct. A feature of the PA damper is its duct sealing ring and intumescent seal. This compensates for any minor irregularities in the duct which may otherwise create gaps between the duct wall and the damper.

### Fire Rating

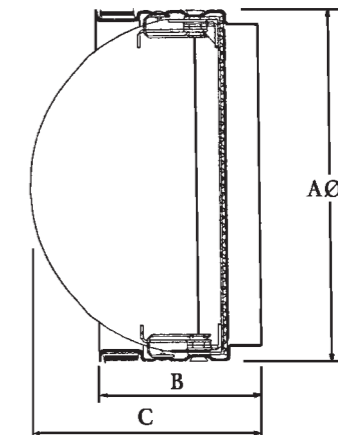
The pyrocheck range of dampers have been tested at Warrington Fire Research Centre. The dampers were assessed against the criterion for integrity as defined in BS476 Part 20 for 4 hours.

The dampers maintained their integrity successfully throughout the test, which was discontinued after 4 hours.

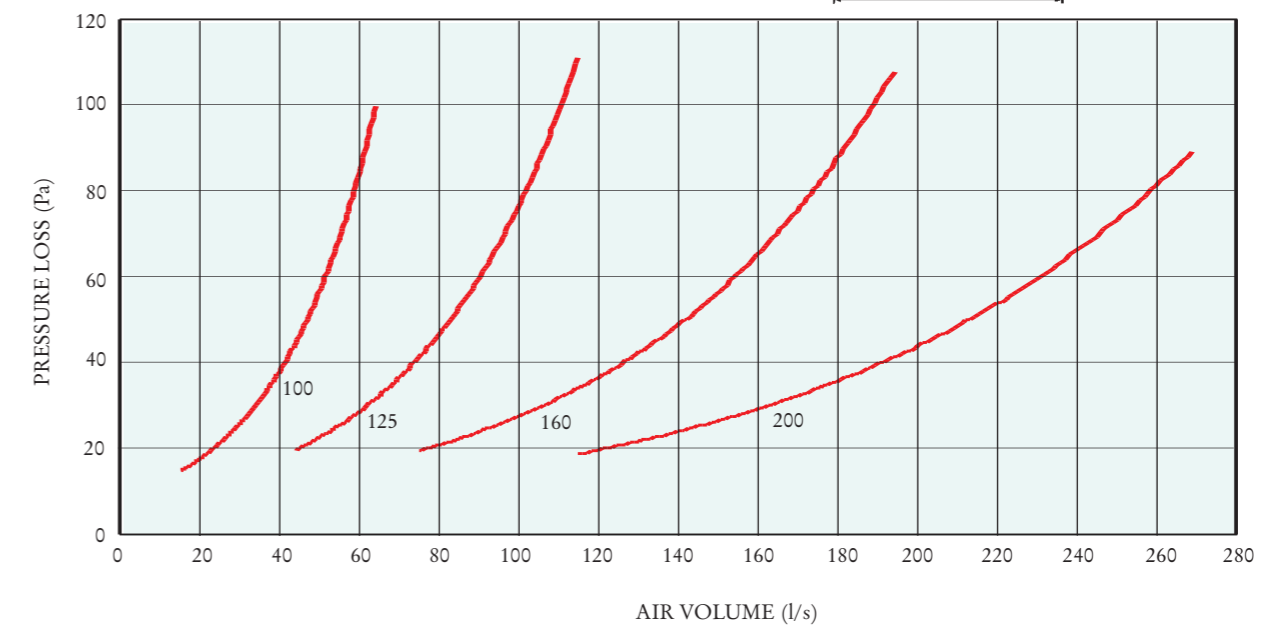
## Fusible Fire Link Dampers

### Dimensions (mm)

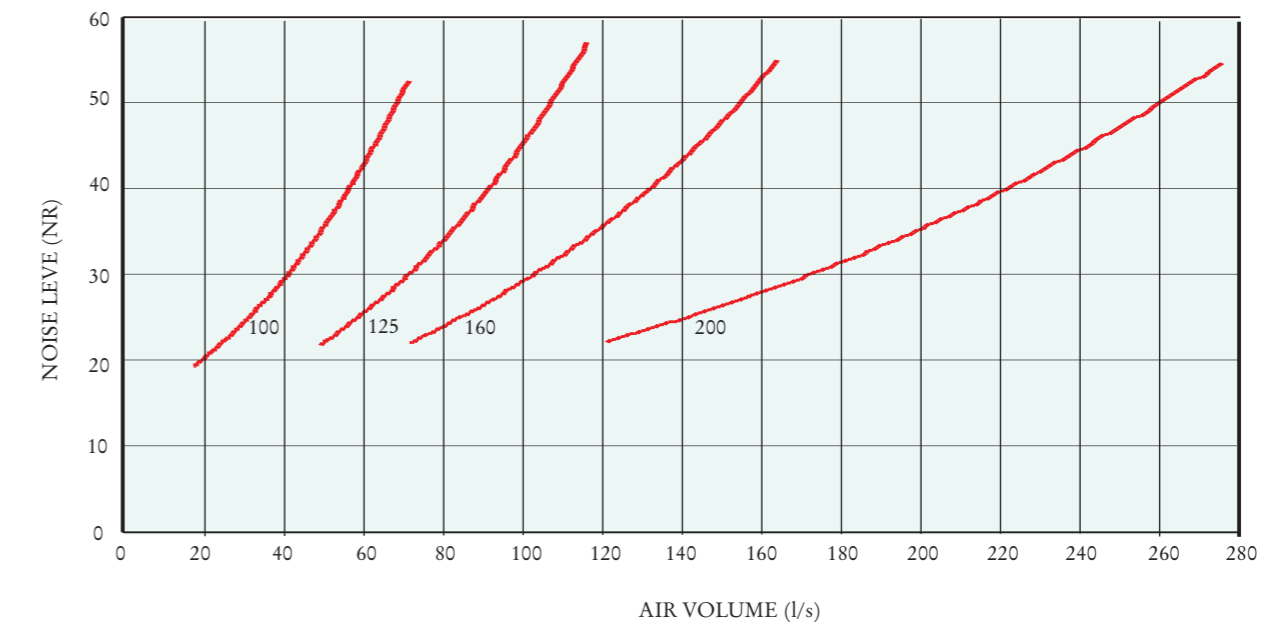
Model No.	AØ	B	C
PA 100B	99	72.5	72.5
PA 125B	124	72.5	85
PA 160B	159	72.5	103
PA 200B	199	72.5	121



### Pressure Loss Graph



### Noise Generation Data



# Ventilex

## Plastic Extract and Supply Valves



Extract and Supply Air version all with adjustable core for precise setting of required airflow

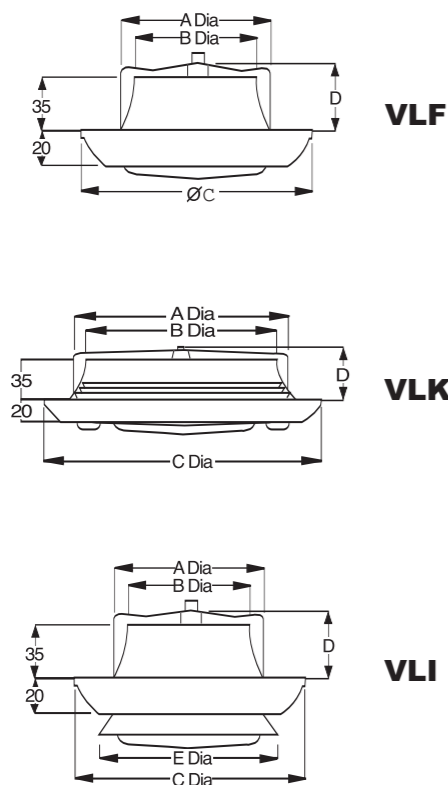
Wide range from 4" to 8" allowing proper selection for your application

Supplied with 'Plug-in' fixing frame giving easy access for cleaning or adjustment.

Elegant design combined with excellent performance characteristics makes the Ventilex range eminently suitable for any extract or supply air application. Ventilex valves have been especially designed to cope with high humidity environments commonly encountered in bathrooms, kitchens, toilets etc. A particular feature of the design is an air flow, which avoids 'fouling' of adjacent decorated surfaces.

Made from white polyamide and polypropylene the valves are suitable for temperatures up to 100°C. The adjustment screw is brass with stainless steel retaining springs.

### Dimensions (mm)



### Extract Dimensions (mm)

Code No	A*	B	C	D
VLF 100	95	80	145	40
VLF 125	120	93	158	40
VLF 150	145	124	195	40
VLF 160	158	124	195	40
VLK 200	195	170	245	40

\*spigot diameter

### Supply Dimensions (mm)

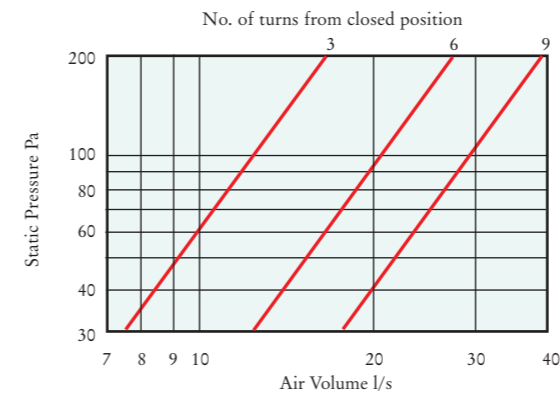
Code No	A*	B	C	D	E
VLI 100	95	80	145	40	125
VLI 125	120	93	158	40	140
VLI 150	145	124	195	40	177
VLI 200	195	170	245	40	-

\*spigot diameter

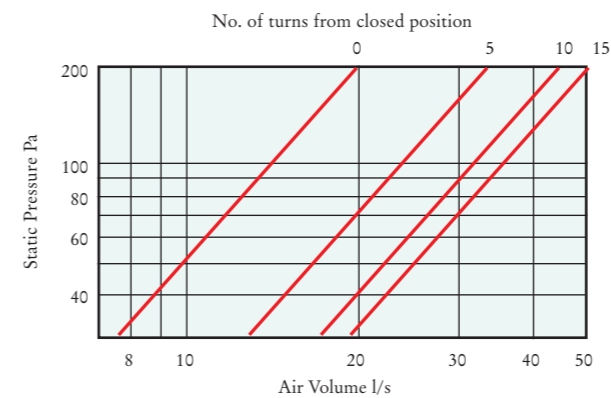
## Plastic Extract and Supply Valves

### Supply Valves

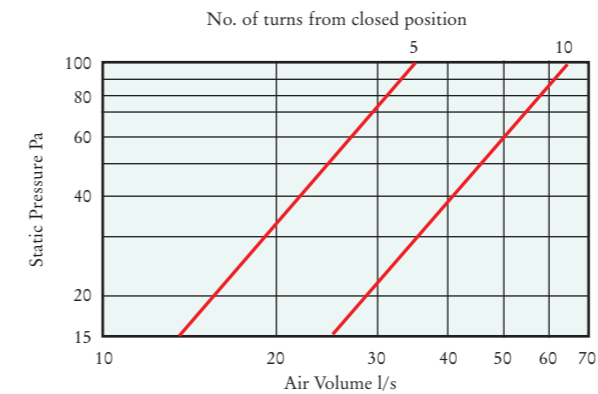
#### VLI 100



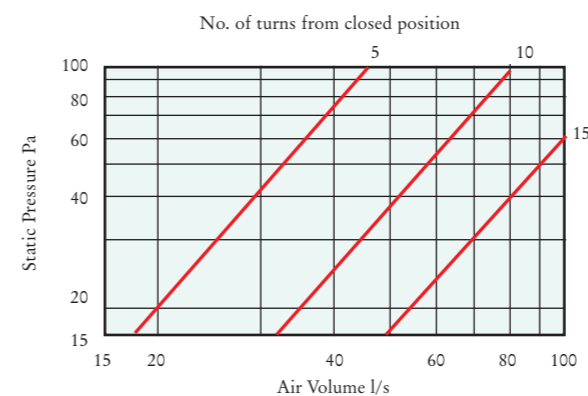
#### VLI 125



#### VLI 150

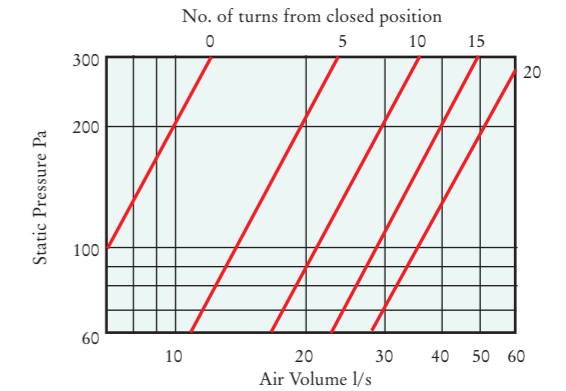


#### VLI 200

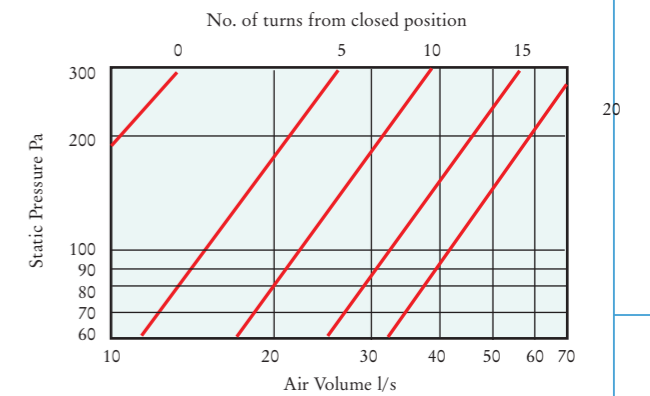


### Extract Valves

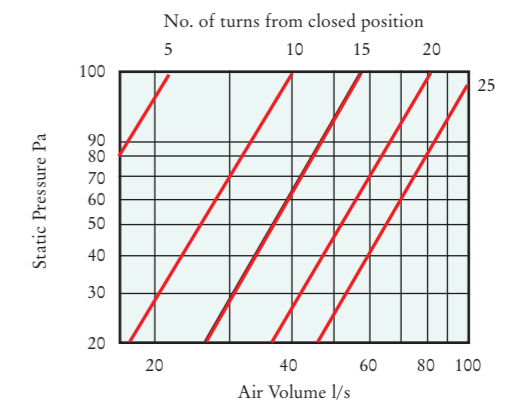
#### VLF 100



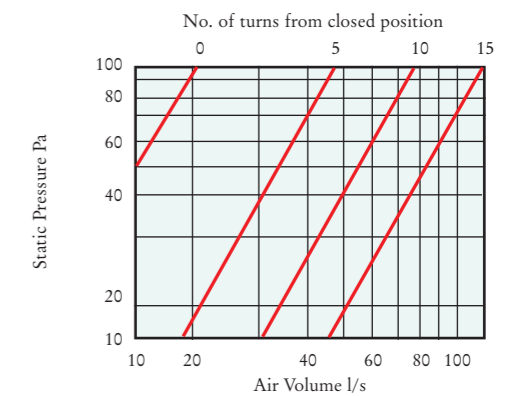
#### VLF 125



#### VLF 150/160



#### VLK 200



# Ventilex

## Fire Protection Ventilation Valves



- Supply and extract valve
- Integrated 2 hour fire damper
- 74° thermal fuse
- Tested to BS476 Part 20
- White epoxy finished steel
- Adjustable centre core

Ventilex Model VHD extract/supply valves offer all the advantages long associated with the Ventilex range, with one very special addition.

Model VHD is also an integrated, 2 hour rated fire damper. The unit operates as a supply/exhaust valve in normal circumstances but is equipped with a thermal fuse and rapid closure spring. Its careful design allows full adjustment over a wide range of pressure/flow settings. When the temperature rises above 74°C the thermal fuse releases the closure mechanism. In this closed position the valve has been tested in accordance with BS476 Part 20 and is independently verified as having a 2 hour rating.

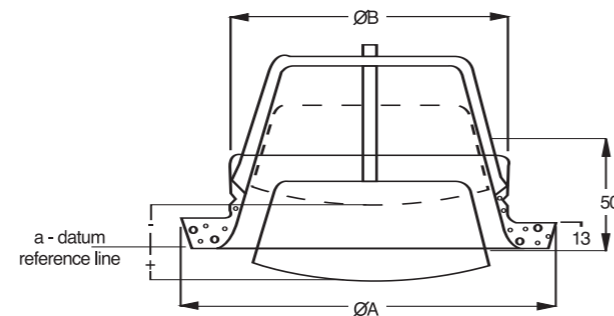
The whole assembly has an epoxy white finish and is constructed from steel. The valve installs into a fixing frame allowing simple connection to ductwork and easy access for adjustment or cleaning.

The central core is adjustable and offers a wide range of setting to meet specific system designs. Datum position is achieved when core face is level with face of valve (see diagram below).

### Applications

Bathrooms, kitchens, toilets and lobby areas requiring an efficient adjustable diffuser with integral fire protection.

### Dimensions (mm)

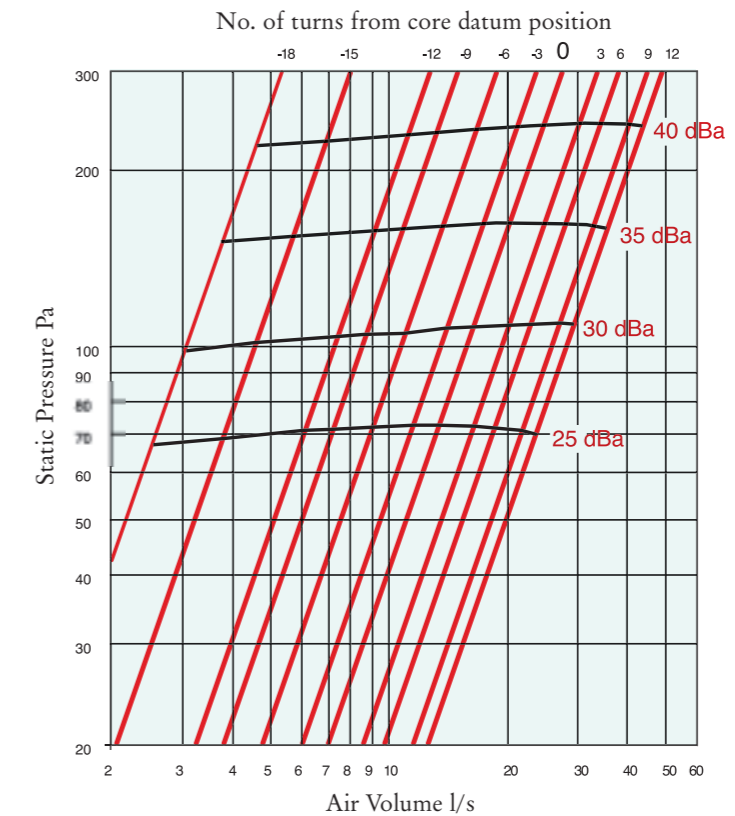


Code No	ØA	ØB
VHD 100	140	99
VHD 150*	200	150*

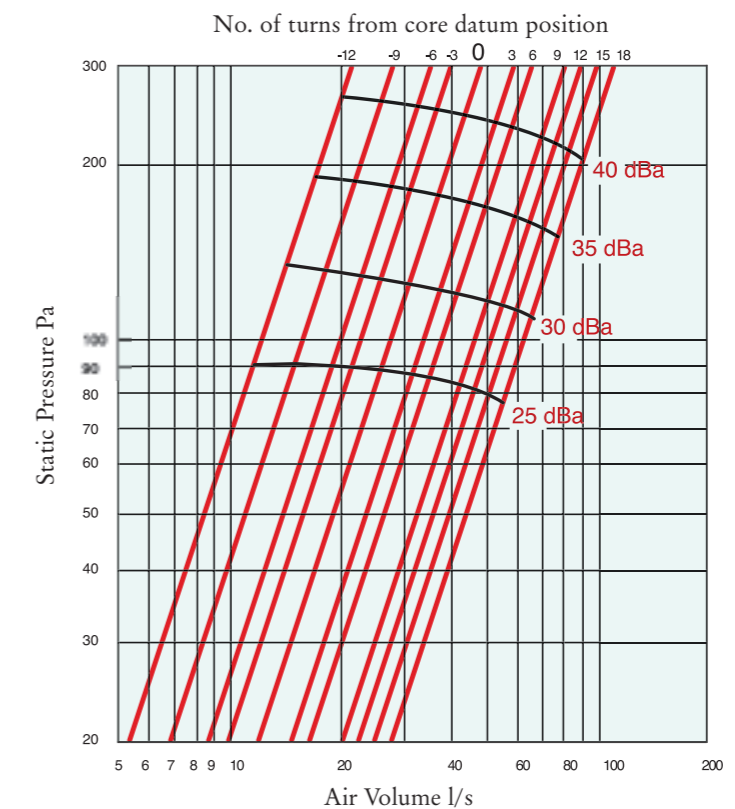
\*125mm and 200mm to special request

## Fire Protection Ventilation Valves

### VHD100



### VHD150



# Ventilex

## Steel Ventilation Valves



- Supply and extract valve
- White epoxy finished steel
- Adjustable centre core
- Bayonet fixing - easy removal for cleaning

Ventilex Model VHE extract/supply valves are a new addition to the well established Ventilex range and continue the concept of elegant design combined with excellent performance characteristics.

The valves are constructed from white epoxy finished steel and are supplied complete with a bayonet action fixing frame.

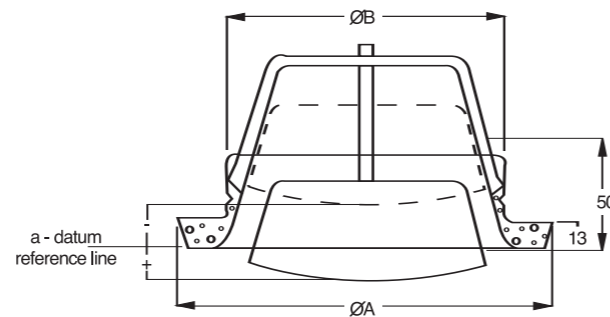
This allows positive locking and sealing of the valve yet still enables, easy removal for adjustment or cleaning. The valve profile is designed to eliminate fouling of adjacent decorated surfaces - a feature common to all Ventilex valves.

The central core is adjustable and offers a wide range of settings to meet specific system designs. Datum position is achieved when core face is level with face of valve (see dimensional diagram).

### Applications

Bathrooms, kitchens, toilets, lobby areas or any room requiring a single diffuser for up to 100m<sup>3</sup>/hr (multiple arrays can of course be utilised).

### Dimensions (mm)



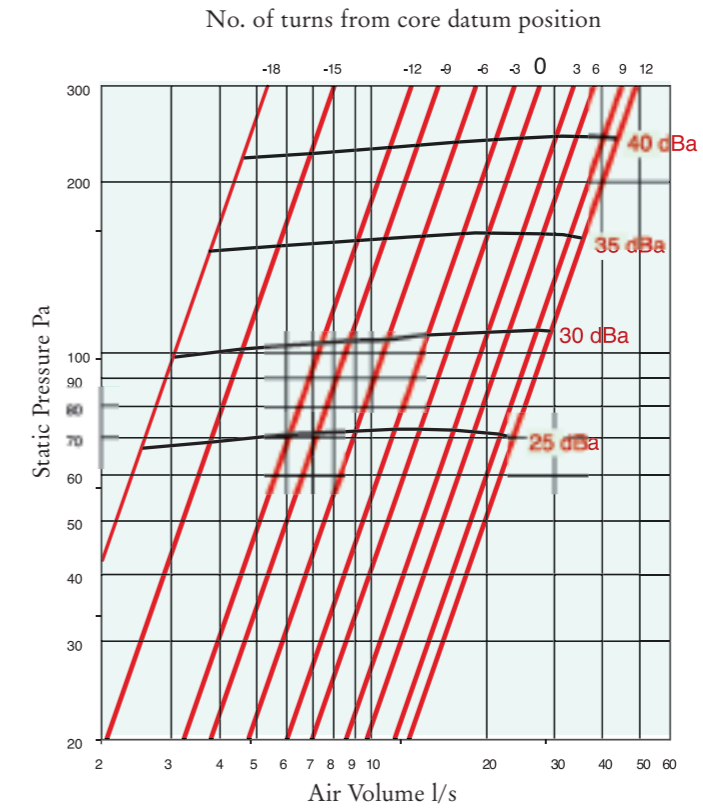
Code No	ØA	ØB
VHE 100	140	99
VHE 150*	200	150*

\*125mm and 200mm to special request

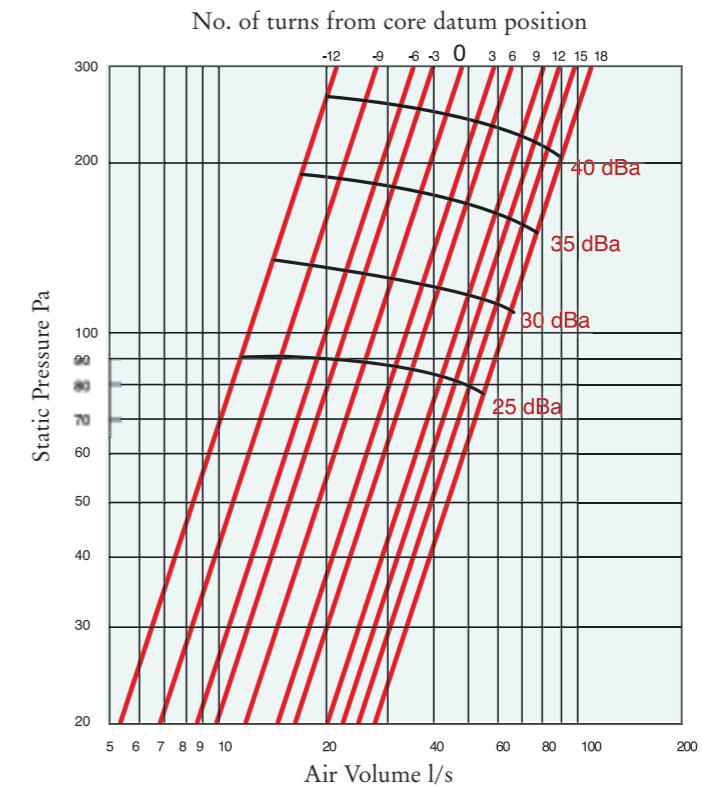
The Ventilex Steel Valves can be supplied in special colours to match the building design.

## Steel Ventilation Valves

### VHE100



### VHE 150



# Ventilex

## Ceiling Terminals



Streamlined moulded design means less turbulence and less noise.

Simple to install - needs only a 225mm diameter hole.

Stepped collar design accommodates 150, 175 & 200mm (6", 7" or 8") circular ducts.

Available with 4-way, 3-way or 2-way diffuser.

Adjustable damper included.

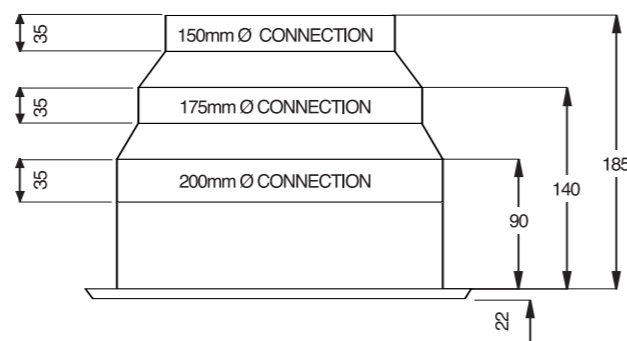
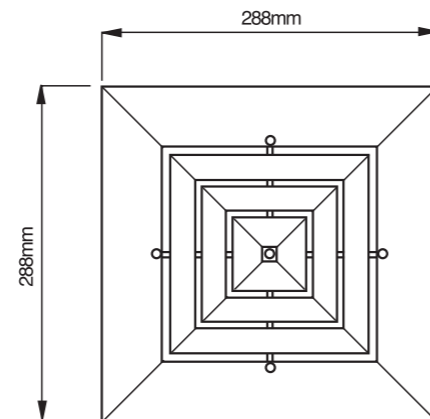
Ventilex ceiling terminals are manufactured from top grade high impact polymers to resist breakage, scratching and fading. Their moulded design is more streamlined than most comparable diffusers producing less turbulence and hence less noise. They are suitable for air temperatures of up to 122°C.

Installation requires only a 225 diameter hole in the ceiling into which the ventilex ceiling terminal is inserted. Ingenious clips rotate into position and clamp the unit into place as the four screws are tightened.

A stepped collar arrangement can accommodate 150, 175 or 200 diameter ducting. Special tear away bands enable the unwanted section to be removed without the need for cutting. The collar design allows easy installation of flexible ducting and has a special lip to give an effective seal when using rigid ductwork.

To assist the regulation of airflow each Ventilex ceiling terminal includes a manually adjustable damper. The Ventilex ceiling terminals can be supplied in special colours to match building design.

### Dimensions (mm)



Code No	Diffuser Type
VCT 4	4 Way Diffuser
VCT 4 + VCG 3	3 Way Diffuser
VCT 4 + VCG 2	2 Way Diffuser

## Ceiling Terminals

### 4-Way Diffuser

Air Volume l/s	Pressure Loss Pa	Throw metre	Face Velocity m/s
26	1.8	1.18	0.93
35	2.8	1.62	1.25
42	4.3	1.95	1.49
52	6.1	2.38	1.82
59	7.6	2.71	2.08
71	10.9	3.23	2.57
82	14.5	3.78	2.85
94	18.5	4.33	3.25
118	29.0	5.39	4.23
141	41.5	6.49	5.08
165	56.5	7.56	5.92

### 3-Way Diffuser

Air Volume l/s	Pressure Loss Pa	Throw metre	Face Velocity m/s
26	2.0	1.52	0.96
35	3.6	2.07	1.30
42	5.1	2.47	1.57
52	7.6	3.02	1.88
59	9.6	3.44	2.26
71	13.7	4.11	2.63
82	18.5	4.82	3.06
94	24.0	5.49	3.50
118	37.5	6.86	4.38
141	54.0	8.23	5.25
165	73.5	9.60	6.13

### 2-Way Diffuser

Air Volume l/s	Pressure Loss Pa	Throw metre	Face Velocity m/s
26	1.5	1.49	0.83
35	2.3	2.04	1.16
42	3.6	2.44	1.34
52	5.3	2.99	1.68
59	6.9	3.38	1.91
71	9.9	4.08	2.29
82	13.5	4.75	2.71
94	17.5	5.43	3.07
118	27.5	6.80	3.85
141	39.6	8.14	4.62
165	53.8	9.51	5.38

\*1 - All throw measurements are measured from centre of grille to a terminal velocity of 0.254 m/s.

\*2 - Throw measurements are equal in all three directions +/-5%.

\*3 - Noise level of any diffuser is directly related to face velocity. As a general rule, face velocity should be under 4 m/s for residential applications.

NOTE: Supply diameter has no appreciable effect on characteristics or airflow specifications, but should be consistent with the desired airflow of the particular outlet and application.

# Unitex Roof Cowl System



Complete weather proofing with low pressure drop.

Supplied complete with bird guard

Galvanised steel construction additionally protected by a dark brown epoxy powder coat finish

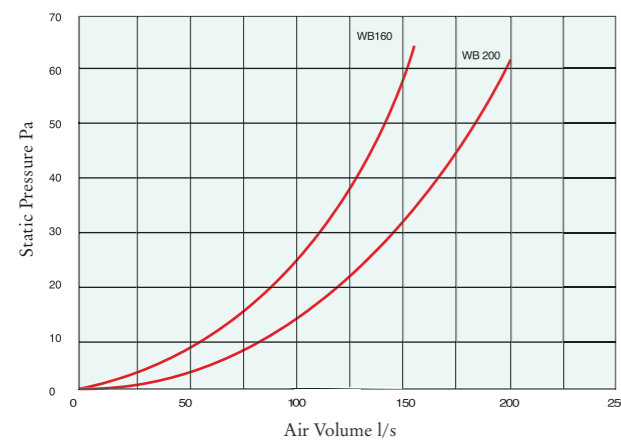
Weather apron in code 3 lead

Suitable for flat or pitched roofs up to 20° as standard

Can be supplied in special colours to match building design

The Unitex Roof Cowl System greatly simplifies the roof termination of mechanical ventilation systems. Consisting of an attractive epoxy finished cowl with a lead weather slate and a range of direct connection reducing fittings. It is suitable for connection to spiral duct, soil pipe and flexible duct from 125 to 250mm diameter.

## Pressure Loss Graph



## Product Range Component Selection

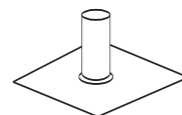
Ducting Method	Cowl Code No	Weather Apron Code No	Adaptor Code No
125mm Spiral	WB 160	WA 160	OR16012
150mm Spiral	WB 160	WA 160	Not Required
150mm Soil Pipe	WB 160	WA 160	Not Required
200mm Spiral	WB 200	WA 200	Not Required
200mm Soil Pipe	WB 200	WA 200	Not Required
250mm Spiral	WB 200	WA 200	Not Required
250mm Soil Pipe	WB 200	N/A	OR25020

## Product Range



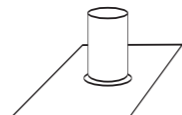
### COWL ASSEMBLY

WB160 For ducts from 125 to 175mm  
WB200 For ducts from 175 to 200mm



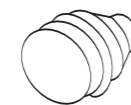
### WEATHER APRON FOR FLAT ROOFS

WA160  
WA200



### WEATHER APRON FOR PITCHED ROOFS (20° MAX)

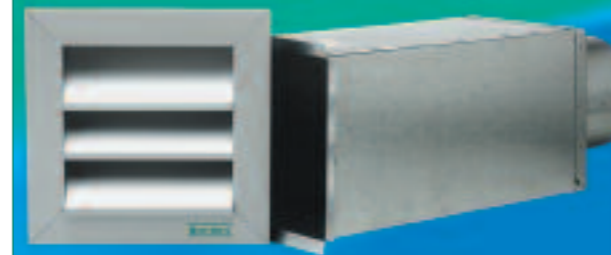
WA160/20  
WA200/20



### ADAPTOR

OR16012 (125 to 160mm)  
OR25020 (200 to 250mm)

# Wall Terminals



External weather louvre, wall sleeve and duct connection spigot in one unit

Satin anodised louvre gives full weather protection

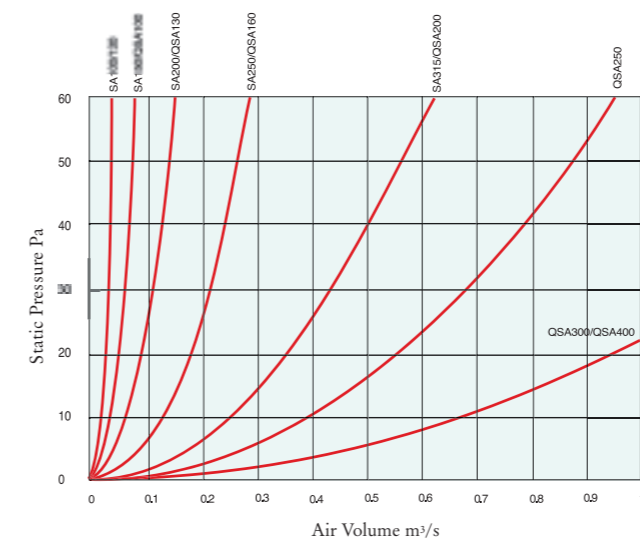
Epoxy powder coated finish, weather louvre available as optional extra

280mm or 80mm wall sleeve section

Spigot connections from 100mm to 400mm

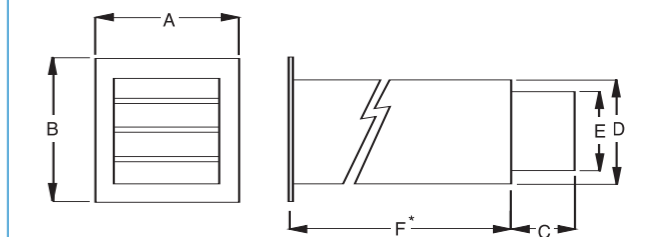
The Unitex SA Wall Terminal Module consists of a high grade satin anodised weather louvre fitted with bird guard (epoxy finish optional extra). This is located in a galvanised sheet metal 'box section' linked to a reinforced circular stub for direct connection to rigid or flexible ductwork. Two lengths of 'box section' are available; 80mm and 280mm. An airstream operated back draught shutter can be fitted in the 280mm version. For applications where larger air volumes are involved the Unitex QSA range of wall terminals is available.

## Product Range Component Selection



## Wall Terminal QSA

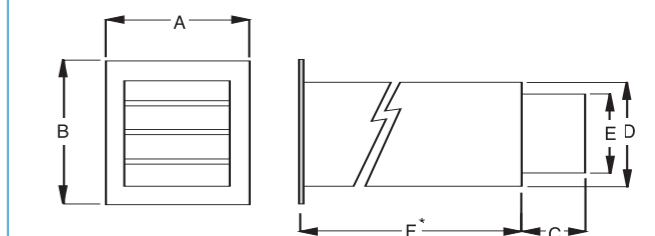
Code N°	EØ	A	B	C	D
QSA100	98	230	230	80	180
QSA125	124	280	280	80	230
QSA150	149	330	330	80	280
QSA200	199	400	400	80	350
QSA250	249	500	500	80	450
QSA315	313	550	550	80	500
QSA400	400	550	550	80	500



\* Dimension F select from 280mm or 80mm

## Wall Terminal SA

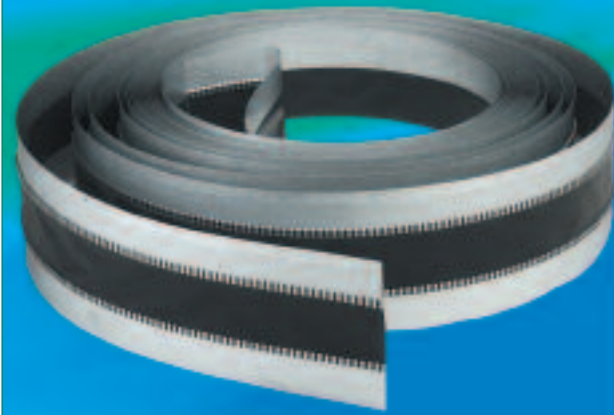
Code N°	EØ	A	B	C	D
SA100	99	180	180	80	130
SA125	124	210	210	80	160
SA150	149	230	230	80	180
SA200	199	280	280	80	230
SA250	249	330	330	80	280
SA315	313	400	400	80	350



\* Dimension F select from 280mm or 80mm

# Unitex

## Flexible Connector



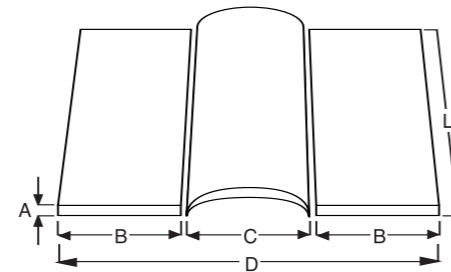
The simplest and most effective way to fabricate flexible duct connectors

Suitable for rectangular, round for flat oval ductwork

Convenient 25 metre dispenser for easy handling and minimum waste

Fabric/metal combinations to meet every installation requirement including Class 1 surface spread of flame rating

The use of flexible duct sections to prevent the transmission of vibration and associated noise along ductwork is a well established practice. Unitex flexible connector is a pre-assembled metal/fabric/metal construction packaged in a dispenser containing 25 metres of connector. Different combinations of metal/fabric are available from stock to meet every type of installation requirement. Unitex flexible connector is equally suited to round, rectangular or flat oval ductwork and is easily formed with the minimum of waste. Fabrics have been selected to provide the optimum solution for performance, fire resistance and economy.



### Dimensions (mm)

Type	A	B	C	D	L(m)
B	0.4	45	60	150	25
G	0.4	45	75	165	25

### Stock Code No.

Type	Type Ref.	Material Ref.
10201	B	R
10305	G	N
10314	G	S

### Reference Chart

Fabric Backing	Material Ref		
	R	N	S
	Polyester	Glass Fibre	Glass Fibre
Coating	Flame	FlameSilicone	
	Retard PVC	Retard PVC	
Colour	Dark Grey	Dark Grey	Silver
Temp. Range	-30°C to +80°C	-30°C to +80°C	-40°C to +280°C
			310°C
	Intermittent 20hrs@70°C		Intermittent
Fire Performance	Flame	Hardly	Hardly
	Retardant	Flammable	Flammable
	Hardly Flammable	BS476 Pt.7 Class 1	BS476 Pt.7 Class 1

# Unitex

## Damper Quadrants



4 Standard sizes

Quick and simple to install

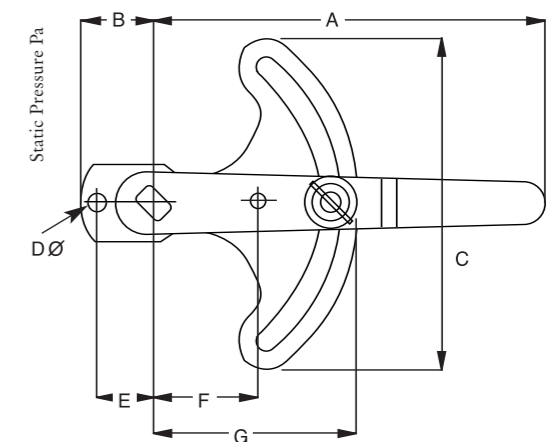
Suitable for circular or rectangular duct work

High quality cast aluminium quadrant sets available in 4 standard sizes, designed to be quick and simple to install. Each size can be used with circular or rectangular ductwork and comes as a pre packed set ready to install. The set comprises of lever arm, base plate, locking wiring nut assembly, quadrant spindle, bearing spindle, bearing assembly and neoprene washers.

### Dimensions (mm) Quadrant

Code No	Dimensions in mm						
	A	B	C	DØ	E	F	G
BGD011	90	20	60	5	13	33	40
BGD021	115	20	90	5	15	50	60
BGD031	155	28	115	5	23	25	77
BGD041	260	40	160	5	28	60	105

### Product Range Component Selection



Note: Quadrant and Bearing Spindles have 3 Fixing Holes on Size BGD041

# Unitex

## Blast Gate Dampers



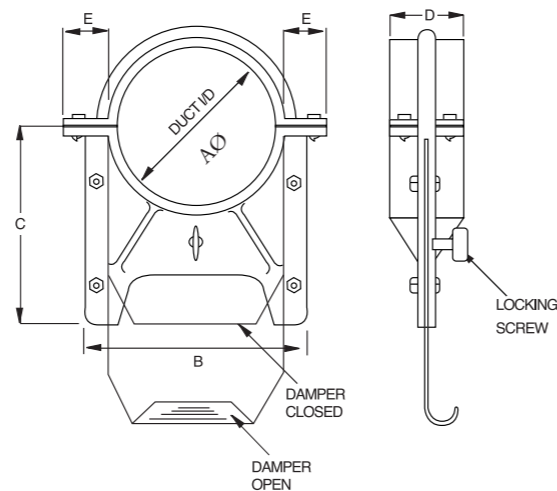
- Genuine metric sizes
- Simple to install
- Easy to operate
- Lockable with thumb screw

Unitex Blast Gate Dampers provide an extensive range of genuine metric sizes eliminating the problems of adapting imperial sized units to metric spiral ducting. Imperial sizes are also available.

Although principally designed for shutting off branches in dust and fume extract systems they can also be used in a wide range of other applications in existing or new systems. Unitex blast gate dampers are simple to install and easy to operate. The manually operated damper can be locked in its open or closed position by using the thumb screw.

The damper bodies are die cast aluminium alloy and the blades are of zinc plated steel. Stainless steel blades are available to special order. The dampers shown are for manual operation but pneumatically operated versions can also be supplied.

### Dimensions (mm)



Code No	AØ	B	C	D	E
BGA063	63	95	90	44	25
BGA080	80	110	105	47	25
BGA100	100	135	130	50	30
BGA125	125	165	155	55	40
BGA150	150	190	175	75	40
BGA160	160	200	190	75	40
BGA180	180	215	200	75	40
BGA200	200	240	230	75	40
BGA224	224	280	250	88	40
BGA250	250	300	290	105	40
BGA280	280	325	290	108	40
BGA300	300	360	340	125	45
BGA315	315	380	350	125	45
BGA355	355	410	400	155	50

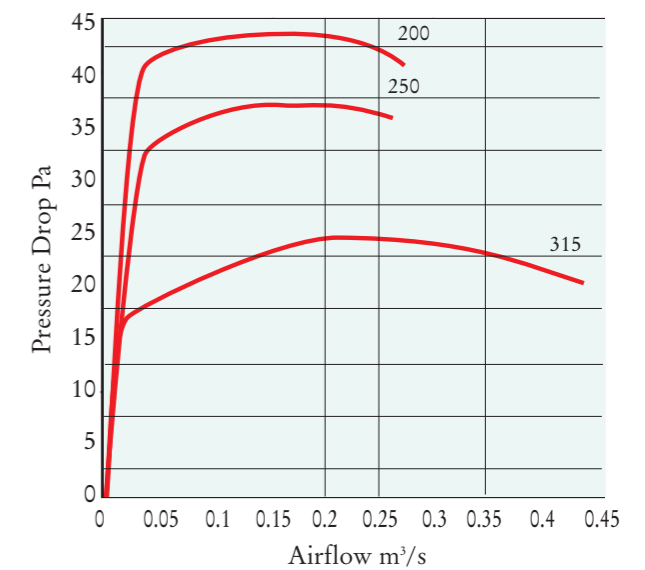
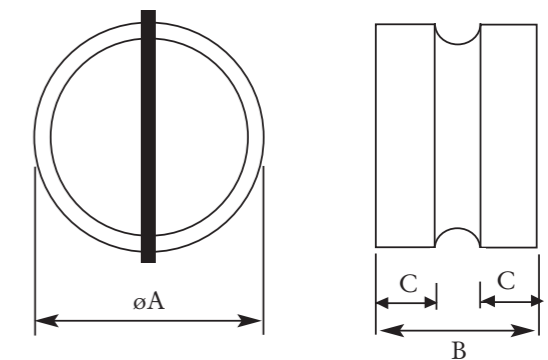
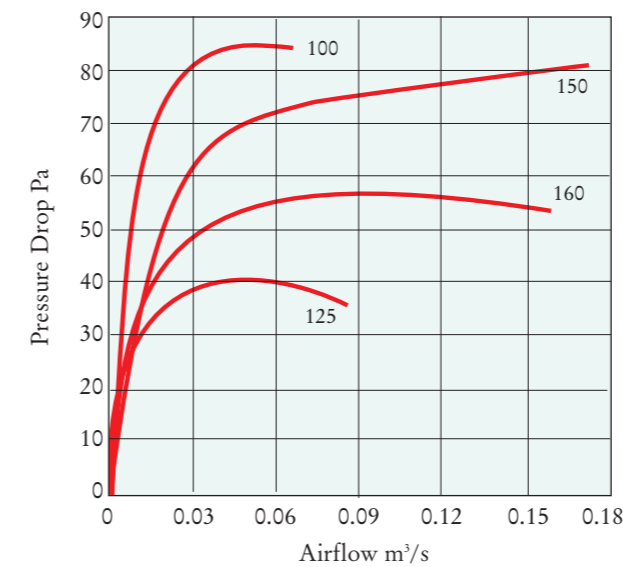
# Unitex

## Back Draught Shutters



- Manufactured in electro-zinc steel
- Positive spring return mechanism
- Sizes 100-315mm diameter

In-line back draught shutters manufactured in electro-zinc steel these units have a positive spring return mechanism. The springs are carefully selected for positive closure without undue pressure loss. Diameters from 100 to 315mm. Also available in 400mm diameter to special request.

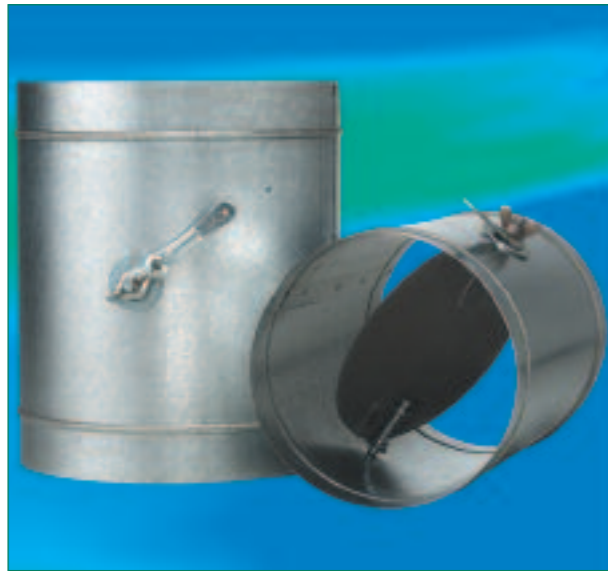


### Dimensions (mm)

Code No.	AØ	B	C
BDS 100	100	80	31
BDS 125	125	100	43
BDS 150	150	100	46
BDS 160	160	120	53
BDS 200	200	140	63
BDS 250	250	140	63
BDS 315	315	140	63

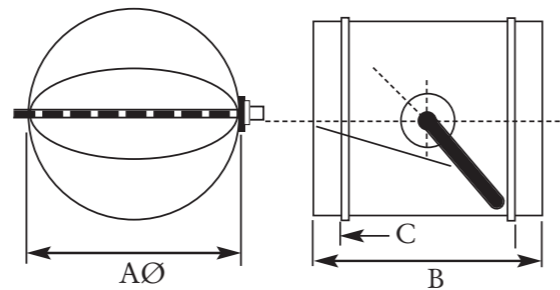
# Unitex

## Volume Control Dampers



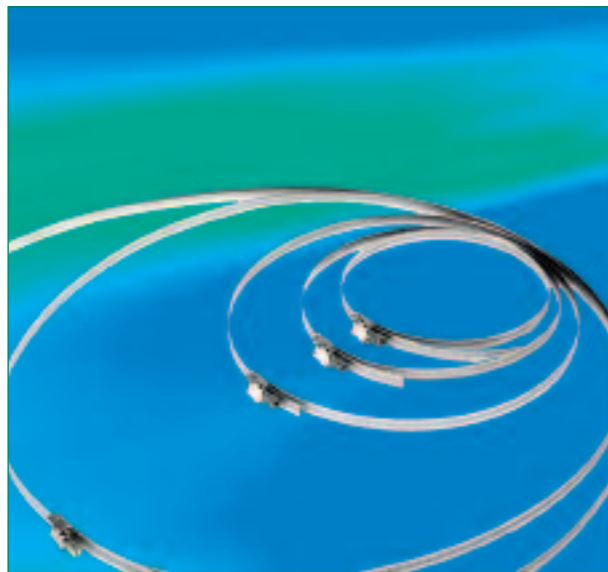
Dimensions (mm)

Code No.	AØ	B	C
VCD 100	100	230	28
VCD 125	125	230	28
VCD 150	150	230	28
VCD 160	160	230	28
VCD 200	200	230	28
VCD 250	250	400	28
VCD 300	300	400	28
VCD 315	315	400	28



In-line dampers for the regulation and balancing of ventilation systems. A locking quadrant & indicator permits simple adjustment. Competitively priced they offer a much more economical solution than expensive multi-blade dampers often used for simple balancing and are easily accommodated in restricted spaces. Available in diameters from 100 to 315mm.

## Speed Clamps

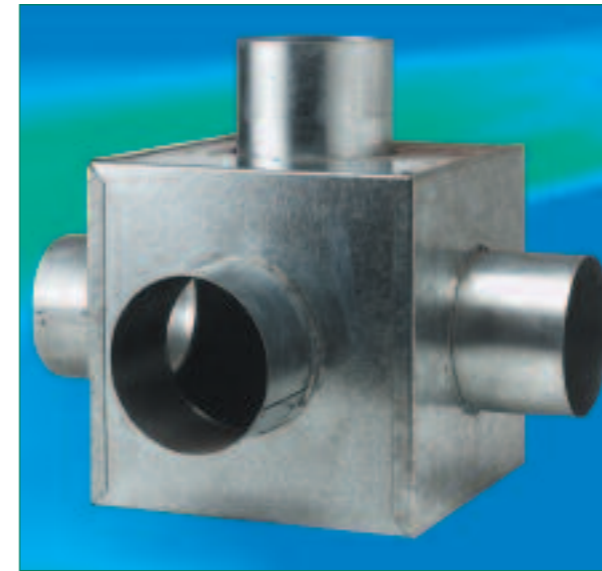


Speed Clamps ready made stainless steel fastening bands in a range of sizes and quicker to apply than conventional strip fastening systems. Each band is fully adjustable and the unique flip lock assembly allows initial adjustment by hand - final tightening for the last few turns, by screwdriver.

Code No	Dia (min. & max.)
49085135	85 to 135mm dia.
49115165	115 to 165mm dia.
49165215	165 to 215mm dia.
49275325	275 to 325mm dia.
49375425	375 to 425mm dia.
49475525	475 to 525mm dia.

# Unitex

## Distribution Boxes



Dimensions (mm)

Code No	Spigots (outside dia.)					
	A	B	1	2	3	4
PLB100	200	200	100	100	100	100
PLB125	200	200	125	100	100	125
PLB150	250	250	150	100	100	150
PLB160	250	250	160	100	100	150
PLB200	305	305	200	150	150	150
PLB250	356	356	250	150	150	200
PLB315	406	406	315	200	200	250

Heavy gauge galvanised steel construction

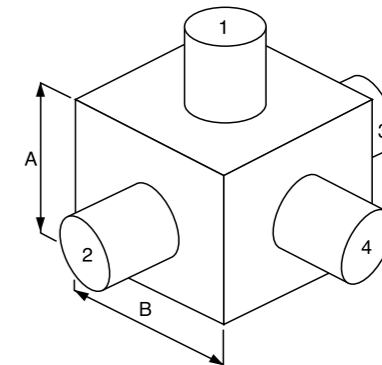
Standard sizes available from stock

Integral balancing dampers available as optional extra

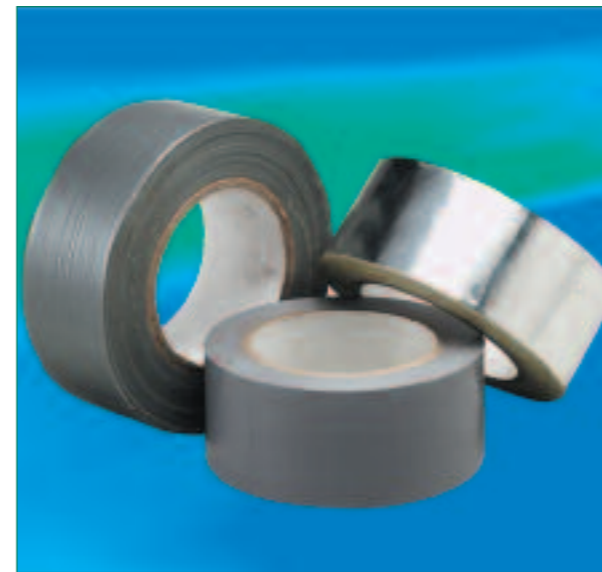
Unitex Plenum boxes are available in a range of standard sizes from stock. Manufactured from heavy gauge galvanised steel with sealed seams, the external surface is additionally protected by an epoxy powder coat finish. Three outlet spigots with a further main duct spigot simplifies the installation of multi-way systems.

Integral dampers can be fitted as an optional extra to allow individual balancing of each connection.

For the first time a connection 'system' is available as a standard off the shelf module for the smaller installation.



## Duct Sealing Tape



Code No	Description
4555047	Silver Fabric Base Polycloth Duct Sealing Tape (50mm wide, 50m length/roll)
4555046	Extra Thick Aluminium Foil Duct Sealing Tape (50mm wide, 45m length/roll)
4550100	Grey Heavy Duty PVC Duct Sealing Tape (50mm wide, 33m length/roll)