

# OUR BUSINESS IS IN PROVIDING THE PARTS THAT GIVE YOU THE BEST SOLUTION

#### WHY BUY FROM NZ DUCT & FLEX



#### PRODUCT IN STOCK

New Zealand Duct & Flex is the country's largest stockist of 'off the shelf' modular ducting, and flex. This allows us to deliver to you the following day\*.



#### **EXPERIENCE**

With our products established in NZ over 25 years ago, we also offer the technical and engineering experience and support of two large European suppliers

### NO COMPROMISE

We aim to ensure your system has no compromises that affect efficiency, saving you energy and/or running costs longer term.

## **OVERNIGHT DELIVERY**

We offer overnight dispatch to our customers. Orders received by 4pm for in-stock items can be couriered to you for delivery the next morning We hold stock in Auckland and Christchurch. \*(Some items over 1.5m. and large items for the South Island may take 2 -3 days).



#### PLANNING FOR THE FUTURE

Our planning service is FREE and we always aim to save you costs now, but also protect your ability to grow in the future, with the product and layouts we suggest.

#### ORDERING WITHOUT HIDDEN COSTS

Our Quotes specify each single item. We are happy for you to order just the additional items you need for your system and will help you re-use existing items and machinery where practical. (In many cases this is our duct product from 2 decades ago.)

#### EXTRAS AND SURPLUS - WORKING WITH YOU

Installations frequently change from the original plan – additional items can be ordered overnight and unused ones returned for credit as long as they are in original condition within 1 month of initial delivery.

We do not accept returns of flex (as it can become damaged invisibly). In common with industry practise, once flex has been cut it's not returnable!

#### QUALITY AT COMPETITIVE PRICES

We believe we offer the finest quality available and the widest and most comprehensive range. Due to the size of our supplier factories, and our high turnover, we are able to offer quality at very competitive prices.

We will always match, or beat, any price, from any competitor, for the SAME product specification. The Filters, fans and ducting are all sourced from the same supplier, with full warranty regarding quality and performance.

#### SWEDISH STEEL

Our 'galv' ducting is made from finest quality Swedish steel, galvanised at source, for long lasting performance (unlike cheaper 'spangled' type galv).

Our heavy 2mm repainted steel is surface treated in JKF's own state of the art automatic powder coating plant ensuring high and uniform quality for an impact and scratch resistant surface.

Stainless Steel duct is manufactured in AISI 304 stainless steel with unique stainless pressed bends in some sizes. It is laser welded, removing the particle traps of folded stainless ducting. Filters, fans and ducting, all from the same supplier, with full warranty regarding quality and performance.





#### WHY CHOOSE MODULAR DUCTING

- Easy to install or alter by your own staff
- Worn parts can be replaced in minutes
- Reusable in different layouts or when new machines are introduced
- Interchangeable with other thicknesses i.e. 2mm bends can be substituted into a 1mm layout to reduce wear
- Smooth pressed bends for less wear and lower running costs
- Excellent seals and rigidity leaks in an extraction system mean loss of capacity and additional noise. Our connectors ensure tight joints as well as strength.



#### WHY CHOOSE OUR FLEX

We have specialist ranges including:

- Antistatic poly for reduced dust retention in ducting and no static electric shock or explosion risks
- Specialist CNC flex for wood working CNC routers that is very flexible but doesnt implode under pressure
- High Temp Silicon flex for up to 300°C

Other products include Agriflex, Chemical resistant flex, PVC suction flex and flex suitable for garage exhausts – see pages 22-25



WE BELIEVE IN LOW PRESSURE, LOW MAINTENANCE DESIGN. WE GIVE YOU A BIGGER FILTER WITH MORE SURFACE AREA.

WHEN COMBINED WITH CLEANING SYSTEMS TO PROLONG THE LIFE OF THE FILTERS, OUR FILTERS USE LESS POWER, AND REQUIRE LITTLE MAINTENANCE.

## FILTER SYSTEMS

Our filter range is manufactured by JKF Industri based in Denmark. JKF has one of the most extensive ranges of filters in the industry- from extraction systems to suit small to medium workshops, to systems for large industrial 24/7 plants.

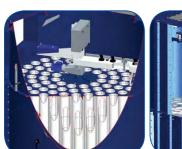
#### FILTER SELECTION

We offer a full range of traditional Modular Filter Bag Houses, Intake and Silo filters, Point filters and Pulse filters ranging from 1000m<sup>3</sup>/ hour or less, to over 500,000m<sup>3</sup>/hour. These are all standard filters, tried and tested over 60 years manufacturing from Europe's leading supplier.

They are available to the highest construction standards, meeting specified corrosion class and available with the world's most advanced explosion safety design

The range includes models with PowerPulse® Cleaning giving market leading low energy consumption.

All filter products meet EN IOS 9001:2008 and are manufactured under EN ISO 18001 and EN ISO 14001 environmental standards.



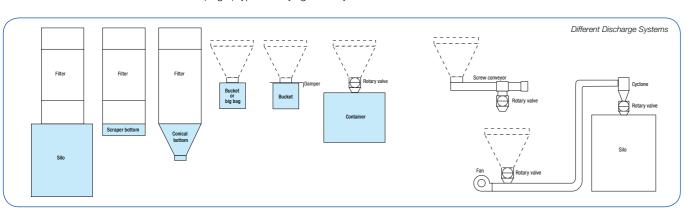




| Filter Type                 | Super Blower Filter | Blower Filter | Jet Filter JF9-18 | Blower Filter BF-ET | Dust Storm | Dust Storm DS7-12EC | Super Jet Filter | Multi Modular Bag Filter | Modular Bag Filter | Intake Filter | Point Filter |
|-----------------------------|---------------------|---------------|-------------------|---------------------|------------|---------------------|------------------|--------------------------|--------------------|---------------|--------------|
| ATEX APPROVED               | 1                   |               |                   | 1                   | 1          | 1                   | 1                | 1                        |                    |               |              |
| POSITIVE PRESSURE           | 1                   | 1             | 1                 | 1                   | 1          | 1                   | 1                | 1                        | 1                  |               |              |
| NEGATIVE PRESSURE           | 1                   | 1             | 1                 | 1                   | 1          | 1                   | 1                | 1                        |                    | 1             | 1            |
| INLET                       |                     |               |                   |                     |            |                     |                  |                          |                    |               |              |
| Tangential                  | 1                   | 1             | 1                 | 1                   | 1          | 1                   |                  |                          |                    |               |              |
| Air Supply Chamber          |                     |               |                   |                     |            |                     |                  | 1                        | 1                  | 1             |              |
| Side Inlet Settling Chamber | 1                   |               |                   |                     |            |                     |                  |                          | 1                  |               |              |
| Side Inlet Partial Downflow |                     |               |                   |                     | 1          |                     | 1                |                          |                    |               |              |
| DISCHARGE                   |                     |               |                   |                     |            |                     |                  |                          |                    |               |              |
| Conical Bottom              | 1                   | 1             | 1                 | 1                   | 1          | 1                   |                  | 1                        | 1                  |               |              |
| Screw                       | 1                   |               |                   |                     |            |                     |                  | 1                        | 1                  |               |              |
| Rotary Valve                | 1                   | 1             | 1                 | 1                   | 1          | 1                   | 1                | 1                        | 1                  |               |              |
| Scraper Bottom              | 1                   | 1             | 1                 | 1                   | 1          |                     | 1                |                          |                    |               |              |
| Bucket                      | 1                   | 1             | 1                 | 1                   | 1          | 1                   |                  | 1                        | 1                  |               |              |
| Bag                         |                     |               |                   |                     |            |                     |                  | 1                        | 1                  |               |              |
| FILTER CLEANING             |                     |               |                   |                     |            |                     |                  |                          |                    |               |              |
| Blower Cleaning             |                     | 1             |                   |                     |            |                     |                  |                          |                    |               |              |
| Jet Cleaning                |                     |               | 1                 |                     |            |                     |                  |                          |                    | 1             | 1            |
| Power Pulse Cleaning        | 1                   |               |                   | 1                   | 1          |                     | 1                |                          |                    |               |              |
| HPBS Cleaning               | 1                   |               |                   |                     |            |                     |                  |                          |                    |               |              |
| Regenerating Blower         |                     |               |                   |                     |            |                     |                  | 1                        | 1                  |               |              |
| EC Cleaning                 |                     |               |                   |                     |            | 1                   |                  |                          |                    |               |              |

#### DISCHARGE SYSTEMS

Filter discharge of dust is dependent upon type and volume of dust and customer requirements. Modular filters can also have chain or screw(auger) type conveying to rotary valve exits.



# EXPLOSION SAFETY SYSTEMS

2 levels of systems are available

- ATEX approval
- ATEX plus VFV venting

#### ATEX APPROVAL



Explosion relief venting in the fiter body

Dust can be very explosive. Industrial filters consist of a dust filled part on the inlet side and a clean air part on the outlet side. Dust explosions occur in the dust filled part of the filter. Instances occur around the world every year where employees are killed or injured by explosions of this type. A spark ignites the dust causing an explosion inside the filter. The filter, having no means of releasing this energy is blown apart and fire, parts of the filter and dust erupts with great force against the surrounding building, equipment and people.

In order to address this Europe has introduced a safety directive called ATEX.

This provides for the release of this explosive force in a controlled manner. This normally consists of an explosion panel located in the side of the filter that opens like a pressure release valve.

All our applicable filters can be fitted with this system and certified to ATEX approval standard.

#### ATEX + VFV EXPLOSION RELIEF VENTING



In addition, to provide ultimate safety for you and your staff we can supply applicable filters with an enhanced system of safeguards.

One of the problems with explosion membranes as shown above is that risk of damage to building and injury to personnel in the vicinity of the filter still exists While the filter remains in one piece, the hot gas, dust and fire that emerges from the filter can still injure.

We therefore can offer VFV explosion relief venting which releases the explosion into the clean air side of the filter. Explosion release vents are then fitted to the roof of the filter and any explosive dust is kept within the filter and only the shock wave is released to atmosphere. This eliminates the danger of secondary explosion and anyone near the filter at the time of explosion will not be exposed to heat or the shockwave.

VFV explosion relief venting

#### MODULAR MMBF FILTER FITTED WITH VFV EXPLOSION VENTING



Provided the filter is located outside the building we believe this VFV vertical venting of the shockwave while containing the dust and heat is the best system currently available to protect you, your staff and

Full details of both these safety systems are available. They are calculated according to VDI 3763, part 1 2002 and European Standard EN 14491:2002.

# **DUST FILTERS**

A COMPLETE RANGE OF ENERGY LEADING FILTERS TO SUIT ANY DUST TYPE. MOST CAN BE FITTED WITH POWERPULSE® OPTIMUM CLEANING WITH LOWER ENERGY CONSUMPTION THAN OTHER COMPRESSED AIR BASED SYSTEMS.

Available to European Atex safety approval standards if required.









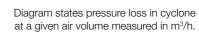


|   | 1 1 1 1  |  |   |  |  |
|---|--|--|---|--|--|
| Filter type   | Modular Filter   | DustStorm Pulse Filter   | Blower Jet Filter   | SuperJet Filters   | SuperBlower<br>Energy Saving Filter  |
| Air volume  | 1500m³/hour to<br>50,000m³/hour  | 1400m³/hour to<br>25,000m³/hour  | 1300m³/hour to<br>40,000m³/hour   | 34,000m³/hour to<br>53,800m³/hour  | 40,000m³/hour to<br>276,000m³/hour   |
| Pressure type   | Positive or negative pressure depending on type  | Positive or negative pressure filter   | Positive or negative pressure filter  | Positive or negative pressure filter   | Positive or negative pressure filter   |
| Cleaning system   | Antistatic bags as standard Reverse air regenerating fan option  |  | PowerPulse® available.  Market leading, energy saving, cleaning system.  Individual bag cleaning gives very long filter bag life                | PowerPulse® available. Market leading, energy saving, cleaning system. Individual bag cleaning gives very long filter bag life | PowerPulse® available.  Market leading, energy saving, cleaning system.  Large volumes of air and dust can be expanded with inserts  |
| Compressed air requirement  |  |  | 5 bar   | 6.5 to 8 bar   | 5 bar  |
| Safety systems  | Can be supplied with<br>European Atex approved<br>explosion membranes                                  | Supplied as standard with full Atex approved explosion membranes   | Supplied as standard with full Atex approved explosion membranes  | Supplied as standard with full Atex approved explosion membranes   | Supplied as standard with full Atex approved vertical explosion membranes  |
| Low cost and low maintenance. Can be quickly expanded with business growth. Some units stocked for overnight delivery if required |  | Designed for continuous operation if required. Pulse cleaning either by simple, low cost electronic control or fully automatic sensor cleaning | Designed for continuous operation if required. Rotating arm cleans one filter bag at a time to maintain suction and results in long filter life | Inlet is 'partial down flow'<br>for use when dust particles<br>may damage filter socks<br>Side or roof explosion<br>venting    | Designed to run in constant<br>operation. Available with<br>unique Coanda Inlet system<br>- a highly efficient pre<br>separator A very efficient<br>low cost high volume duct<br>filter system |
| Inlet   | Into bottom of chamber below filter bags   | Tangential Inlet   | Tangential Inlet  | Tangenital Inlet   | Tangential or settling chamber inlet   |
| Discharge   | Bags / Rotary Valve or scraper /screw or silo fitting  | Conical or scraper system but silo fitting also available  | Conical or scraper bottom but silo fitting also available   | Scraper bottom with discharge to one or two rotary valves  | Conical bottom with screw<br>and rotary valve or scraper<br>bottom with valve or<br>bucket/container   |
| Dust types  | Most dusts but especially sawdust grain, seed, fertilizers and other similar dusts                     | Most high air volume dusts<br>particularly suitable for<br>cement, metal dusts, fine<br>powders and dust types                                 | Large Volume dust loads<br>powders, grains rubber and<br>other problem dust types   | Very Large dust loads<br>especially for timber and<br>associated industries  | Extremely large air and dust loads of all types  |
| Filter Bag Access   | Via easy access large doors<br>maximum 30 bags per door<br>so problem bag is never far<br>from doorway | Roof opens like car bonnet<br>giving access from clean air<br>side of filter   | From clean air<br>compartment at top of unit  | From clean air<br>compartment at top of unit   | From clean air<br>compartment at top of unit   |
| Operation   | Short time or 24/7 operation   | Short time or 24/7 operation   | 24/7 all year operation   | 24/7 high load all year  | Very large scale all year operation  |
| County of Origin  | Made in Denmark<br>and Malaysia  | Manufactured in Denmark  | Manufactured in Denmark   | Manufactured in Denmark  | Manufactured in Denmark  |

#### **CYCLONES**

#### Cyclones Type JA

- Cyclone Type JA is intended for separation of fine grain particles in transport and dust extraction plants.
- Cyclones are designed for high efficiency.
- Powder coating corrosion class C3
- Legs are non standard, but available as optional extras.
- Cleaning door in cone is an optional extra.

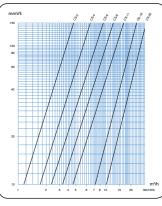




#### Cyclone Type CS

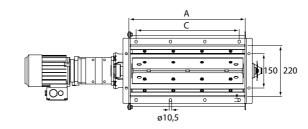
- Spiral Cyclones Type CS are used for air treatment plants in the wood and paper industries and for corn and feed to separate chaff and corn dust in exhaust air from drying and cleaning plants.
- They are made of rolled and riveted hot-dip galvanised sheet metal, but can be supplied in welded 2-3mm sheet.
- Type CS-20 is painted in RAL 5010.
- · Cleaning door in cone is an optional extra.

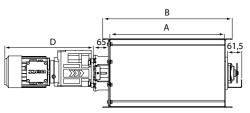
Diagram states pressure loss in cyclone at a given air volume measured in m<sup>3</sup>/h.

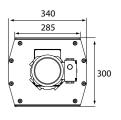




#### **ROTARY VALVES**







- Rotary Valves are fitted with a 6-bladed rotor with hard-wearing rubber blades bolted to the rotor shaft plate profiles.
- The rotor is separated from the rotor housing by rubber seals.
- The shaft is suspended on bearings and connected directly to the gear motor. Type JK200-S is also fitted with a safety coupling between rotor and gear motor.
- The rotor is made of 2mm plate and painted with industrial
  - Neoprene rubber blades for -10°C to max. 70°C
  - Silicon rubber blades for 60°C to max. 250°C

#### **Rotation Sensor**

- Supplied as standard ready for fitting of rotation sensor.
- JK-S Rotary Valve is ATEX approved for category 2D.
- JK-EXS is approved for category 1D safety system



| ТҮР   | Έ   | <b>A</b><br>mm | B<br>mm | <b>D</b><br>mm | C<br>mm | <b>WT</b><br>Kg | MOTOR<br>OUTPUT<br>kW | AMP<br>consumption<br>at 400V | min-1 | CAPACITY<br>50% FULL<br>m³/h |
|-------|-----|----------------|---------|----------------|---------|-----------------|-----------------------|-------------------------------|-------|------------------------------|
| JK-2  | 5S  | 250            | 315     | 387            | 1X150   | 45              | 0.55                  | 1.38                          | 20    | 10                           |
| JK-5  | OS  | 500            | 565     | 387            | 3X150   | 59              | 0.55                  | 1.38                          | 20    | 20                           |
| JK-7  | 5S  | 750            | 815     | 387            | 4X150   | 73              | 0.55                  | 1.38                          | 20    | 32                           |
| JK-10 | 00S | 1000           | 1065    | 416            | 6X150   | 94              | 0.55                  | 1.38                          | 20    | 42                           |
| JK-15 | 50S | 1500           | 1565    | 416            | 9X150   | 122             | 0.55                  | 1.38                          | 20    | 63                           |
| JK-20 | 00S | 2000           | 2065    | 416            | 13X150  | 165             | 0.55                  | 1.38                          | 20    | 83                           |



# **CLEANING SYSTEMS**

Various systems are used to clean the filter units depending upon filter type.

- PowerPulse Cleaning market leading, low energy cleaning
- Blower cleaning
- Jet cleaning
- EC cleaning
- Regenerating fan cleaning

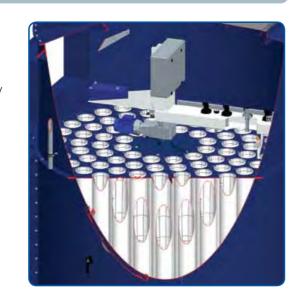
#### **POWERPULSE CLEANING**

The PowerPulse cleaning system uses compressed air pulsed from a moving arm on which the systems jets are mounted. The arm moves accurately from bag to bag dosing precisely the correct air pressure by measuring air velocity through the filter unit. One filter bag at a time is cleaned. The PowerPulse system uses low pressure of 1.5 to 3 bar only meaning low energy consumption, uniform filter cleaning and minimal wear on the filter media.

This system gives optimum cleaning with lower energy consumption than other compressed air based systems. PowerPulse is available for Blower, SuperBlower, DustStorm and SuperJet filters

The PowerPulse system is available with Atex Approval (European safety approval) and can be supplied with or without separate compressor in built 2.2kw maintenance - free compressor with a capacity of 350lt /minute.

PowerPulse is supplied with an electronic control systems that is CPU based and can communicate with most PC's and PLC's. The system can be configured to monitor all components in the cleaning system and any faults displayed on either the main control panel or the control unit.



#### **BLOWER CLEANING**

This is by means of a contra flow air flow in the filter bags. A high pressure blower passes cleaning air through special nozzles to the filter bags. These are mounted on a moving arm cleaning a given number of bags at a time depending upon filter model.

The main benefits of this system are the accurate delivery of the cleaning air and less wear on the filter media than most pulse type cleaning.



#### EC CLEANING

This system cleans filters bags using compressed air. 4 Filter elements at a time are cleaned by a single jet valve. These are specially designed jet nozzles sitting precisely above each filter element. The benefits of this system are

- Manual setting of pulse and pause times
- Can be controlled by an external pressure valve or simple electronic control system
- One or more 'end of use close down cleaning' to remove residual dust from the filter. End of use cleaning starts whenever the main fan is shut down
- Low cost for basic electronic system yet very flexible



#### REGENERATING BLOWER

This system is used for cleaning Modular Filters. One module at a time is regenerated as there are partition walls between each of the filters modules. The regenerating fan cycle is regulated depending upon filter load and dust volume. Cleaning is achieved by reversing the air flow and causing dust to become dislodged down the inside of the filter bags and into the bottom of the filter in the dust collection chamber. The regenerating fan is axial and designed to deliver high pressure during cleaning and low flow resistance when idle.

#### Shaker - or vibrating cleaning systems

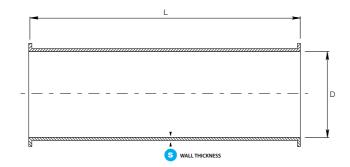
We no longer offer this type of cleaning system in our filters as we believe one of the above cleaning systems will be far more efficient. For basic filters with no cleaning system operating, we use antistatic filter media as standard which we find gives better results for the same or less capital expenditure, and no maintenance required.





#### STRAIGHT DUCT





#### **Galvanised Duct**



- Manufactured from finely galvanised Swedish steel for better resistance to rust
- Modular system with 5mm lip to lock together with chosen connector
- Easy to reconfigure and re-use

#### Stainless Steel



- AISI304 Stainless steel ideal for food
- Laser welded no seam to trap particles
- 5mm lip to lock together with chosen

#### 2mm Heavy Duty Powder Coated Steel



- Robust and wear resistant product where abrasive particles are being carried
- Ideal for saw mills, cement powder
- 5mm lip to lock together with chosen connector
- Can be incorporated with standard galvanised duct system
- Powder coated on outside (colour beige/cream)

#### Seed Duct



- Designed for pneumatic or mechanical conveyance of seed, grain plastic and paper
- 0.9mm thick walls in galvanised steel with rolled

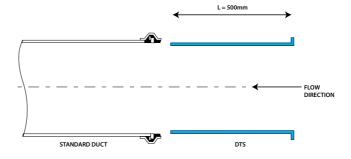
Tight assembly with Lever Lock Seed connectors

| Inside   |                   | Galvanise         | d Steel    |           | Heavy Duty Powder Coated |                  |          | Stainless | Steel 304 | Seed Duct                   |          |  |
|----------|-------------------|-------------------|------------|-----------|--------------------------|------------------|----------|-----------|-----------|-----------------------------|----------|--|
| Diameter | Wall<br>Thickness | <b>S</b> = 0.75-0 | 0.9 mm dep | ending on |                          | <b>S</b> = 2.0mm |          |           | .7mm      | <b>S</b> = 0.9mm            |          |  |
| D = mm   | S = mm            | L = 0.5m          | L = 1.0m   | L = 2.0m  | L = 0.5m                 | L = 1.0m         | L = 2.0m | L = 1.0m  | L = 2.0m  | Note Seed Duct<br>D = 160mi |          |  |
| 80       | 0.75              | D80/0.5           | D80/1      | D80/2     | S0                       | S0               | S0       | S0        | S0        | DSEED160/0.5                | L = 0.5m |  |
| 100      | 0.75              | D100/0.5          | D100/1     | D100/2    | DH100/0.5                | DH100/1          | DH100/2  | DS100/1   | DS100/2   | DSEED160/1                  | L = 1.0m |  |
| 125      | 0.75              | D125/0.5          | D125/1     | D125/2    | DH125/0.5                | DH125/1          | DH125/2  | S0        | S0        | DSEED160/2                  | L = 2.0m |  |
| 140      | 0.75              | D140/0.5          | D140/1     | D140/2    | S0                       | S0               | S0       | S0        | S0        | OD = Outside Diameter       | r        |  |
| 150      | 0.75              | D150/0.5          | D150/1     | D150/2    | DH150/0.5                | DH150/1          | DH150/2  | DS150/1   | DS150/2   |                             |          |  |
| 160      | 0.75              | D160/0.5          | D160/1     | D160/2    | S0                       | S0               | S0       | S0        | S0        |                             |          |  |
| 180      | 0.75              | D180/0.5          | D180/1     | D180/2    | DH180/0.5                | DH180/1          | DH180/2  | S0        | S0        |                             |          |  |
| 200      | 0.75              | D200/0.5          | D200/1     | D200/2    | DH200/0.5                | DH200/1          | DH200/2  | DS200/1   | DS200/2   |                             |          |  |
| 225      | 0.75              | D225/0.5          | D225/1     | D225/2    | DH225/0.5                | DH225/1          | DH225/2  | S0        | S0        |                             |          |  |
| 250      | 0.75              | D250/0.5          | D250/1     | D250/2    | DH250/0.5                | DH250/1          | DH250/2  | DS250/1   | DS250/2   |                             |          |  |
| 275      | 0.75              | D275/0.5          | D275/1     | D275/2    | S0                       | S0               | S0       | S0        | S0        |                             |          |  |
| 300      | 0.75              | D300/0.5          | D300/1     | D300/2    | DH300/0.5                | DH300/1          | DH300/2  | DS300/1   | DS300/2   |                             |          |  |
| 350      | 0.75              | D350/0.5          | D350/1     | D350/2    | DH350/0.5                | DH350/1          | DH350/2  | DS350/1   | DS350/2   |                             |          |  |
| 400      | 0.9               | D400/0.5          | D400/1     | D400/2    | DH400/0.5                | DH400/1          | DH400/2  | DS400/1   | DS400/2   |                             |          |  |
| 450      | 0.9               | D450/0.5          | D450/1     | D450/2    | S0                       | S0               | S0       | S0        | S0        |                             |          |  |
| 500      | 0.9               | D500/0.5          | D500/1     | D500/2    | S0                       | S0               | S0       | S0        | S0        |                             |          |  |
| 550      | 0.9               | D550/0.5          | D550/1     | D550/2    | S0                       | S0               | S0       | S0        | S0        |                             |          |  |
| 600+     | S0                | S0                | S0         | S0        | S0                       | S0               | S0       | S0        | S0        |                             |          |  |

| SO Special Order allow 3-5days | D = Diameter   | L=Length  |
|--------------------------------|----------------|-----------|
| ou opecial uluel allow o-buays | D = Diallielei | L=Ltilgii |

#### TELESCOPIC DUCT







- · Eliminates cutting and welding
- Saves time for installers if duct system distances change
- Telescopic Ducts are a single item 500mm long and ideal to fill gaps left that are less that 400mm. (They do not include the 0.5,1.0 or 2.0m duct that it slips onto)
- Supplied with specially profiled rubber sealed Lever Locks
- Can be undone and adjusted as required

#### To install:

- Simply slip Telescopic section inside the 'down wind' section of duct run
- Slide Telescopic Duct up to meet 'Up wind' section and
- Secure Telescopic using Lever Lock provided



| Inside Diameter | Wall Thickness | Galvanised Steel*   |
|-----------------|----------------|---------------------|
| D = mm          | S = mm         | L = 500mm all sizes |
| 80              | 0.75           | DTS80               |
| 100             | 0.75           | DTS100              |
| 125             | 0.75           | DTS125              |
| 140             | 0.75           | DTS140              |
| 150             | 0.75           | DTS150              |
| 160             | 0.75           | DTS160              |
| 180             | 0.75           | DTS180              |
| 200             | 0.75           | DTS200              |
| 225             | 0.75           | DTS225              |
| 250             | 0.75           | DTS250              |
| 275             | 0.75           | DTS275              |
| 300             | 0.75           | DTS300              |
| 350             | 0.75           | DTS350              |
| 400             | 0.9            | DTS400              |
| 500             | 0.9            | DTS500              |
| 550             | 0.9            | DTS550              |

<sup>\*</sup> Available only as galvanised

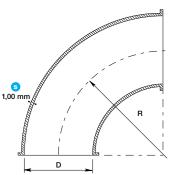
# SAVE TIME FOR **INSTALLERS!**

NO CUTTING OR WELDING REQUIRED!



#### SMOOTH PRESSED BENDS

#### **Benefits**



- Reduce Pressure loss -Smooth bends allow better airflow with less turbulence than segmented bends
- Last longer as they resist the flow of particles less, lower abrasion and no welds to
- Save energy and power costs for your extraction system
- Wide range sizes 80-400mm Diameter

#### **Galvanised Bends**



- Manufactured from finely galvanised steel for better resistance to rust
- 5mm lip to lock onto duct with chosen connector
- Smooth Pressed blends uniquely offered up to 400mm
- Wall thickness 1.0mm

#### 2mm Heavy Duty Powder Coated Steel

- · Robust and wear resistant in 2mm steel plate
- · Can be used with galvanised duct for a longer lasting solution to 'problem' wearing bends
- 5mm lip to lock together with chosen connector
- Powder coated on outside (colour beige/cream) · Manufactured in sections but is smooth bore

#### Stainless Steel



- AISI304 (EN1.4301) Stainless steel ideal for food
- Smooth pressed bends in sizes up to 200mm (250-400mm segmented)

#### Seed Duct Range



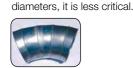
- Hard wearing with 1.5mm on outside bend wall
- Longer radius (R=D x3 ie 480mm) to reduce transport damage and abrasion
- Outside powder coated (colour pale grey)

#### SEGMENTED BENDS



the airflow may not be quite

as efficient, at these large





#### 2mm Heavy Bends

2mm Heavy Bends are available as segmented in 225mm and 275mm.



#### Stainless Steel Bends

Stainless Steel Bends are segmented 250mm and above.

Seed Duct

#### SMOOTH PRESSED & SEGMENTED BENDS TABLE

|                 |             |             | Galvan      | ised Steel              |             |           | Heavy Duty Powder Coated |                  |           | Stai           | nless Steel   | 304       |                           | Seed Duct                                    |             |  |
|-----------------|-------------|-------------|-------------|-------------------------|-------------|-----------|--------------------------|------------------|-----------|----------------|---|-----------|---------------------------|--|-------------|--|
| Inside Diameter |             | (           | Segmented B | = 1.0mm<br>ends S = 0.9 | 9mm         |           | S = 2.0mm                |                  |           | <b>S</b> :     | S = 1.0mm up to 150mm D S = 1.5mm 200mm D Segmented Bends S = 0.8mm |           |                           | S = 1.5mm outside wall S = 1.0mm inside wall |             |  |
| Insic           |             |             | Radius      | s = 1.5 x D             |             |           | F                        | Radius = 1.5 x [ | )         | Radius = 2 x D |   |           | Radius = 3 x D (ie 480mm) |  |             |  |
|                 |             |             | riadiac     |                         |             |           |                          | 110 / 1          |           |                | 144140  |           | Note Seed Du              | ıct available as D                           | = 160mm OD  |  |
|                 | 90°         | 60°         | 45°         | 30°                     | 15°         | 7.5°      | 90°                      | 45°              | 30°       | 90°            | 45°   | 30°       | 90°                       | 45°  | 30°         |  |
| 80              | B80/90      | B80/60      | B80/45      | B80/30                  | B80/15      | B80/7.5   | S0                       | S0               | S0        | S0             | S0  | S0        | BSEED160/90               | BSEED160/45                                  | BSEED160/30 |  |
| 100             | B100/90     | B100/60     | B100/45     | B100/30                 | B100/15     | B100/7.5  | BH100/90                 | BH100/45         | BH100/30  | BS100/90       | BS100/45  | BS100/30  |                           |  |             |  |
| 125             | B125/90     | B125/60     | B125/45     | B125/30                 | B125/15     | B125/7.5  | BH125/90                 | BH125/45         | BH125/30  | S0             | S0  | S0        |                           |  |             |  |
| 140             | B140/90     | B140/60     | B140/45     | B140/30                 | B140/15     | B140/7.5  | S0                       | S0               | S0        | S0             | S0  | S0        |                           |  |             |  |
| 150             | B150/90     | B150/60     | B150/45     | B150/30                 | B150/15     | B150/7.5  | BH150/90                 | BH150/45         | BH150/30  | BS150/90       | BS150/45  | BS150/30  |                           |  |             |  |
| 160             | B160/90     | B160/60     | B160/45     | B160/30                 | B160/15     | B160/7.5  | S0                       | S0               | S0        | S0             | S0  | S0        |                           |  |             |  |
| 180             | B180/90     | B180/60     | B180/45     | B180/30                 | B180/15     | B180/7.5  | BH180/90                 | BH180/45         | BH180/30  | S0             | S0  | S0        |                           |  |             |  |
| 200             | B200/90     | B200/60     | B200/45     | B200/30                 | B200/15     | B200/7.5  | BH200/90                 | BH200/45         | BH200/30  | BS200/90       | BS200/45  | BS200/30  |                           |  |             |  |
| 225             | B225/90     | B225/60     | B225/45     | B225/30                 | B225/15     | B225/7.5  | *BH225/90                | *BH225/45        | *BH225/30 | S0             | S0  | S0        |                           |  |             |  |
| 250             | B250/90     | B250/60     | B250/45     | B250/30                 | B250/15     | B250/7.5  | BH250/90                 | BH250/45         | BH250/30  | *BS250/90      | *BS250/45   | *BS250/30 |                           |  |             |  |
| 275             | B275/90     | B275/60     | B275/45     | B275/30                 | B275/15     | B275/7.5  | *BH275/90                | *BH275/45        | *BH275/30 | S0             | S0  | S0        |                           |  |             |  |
| 300             | B300/90     | B300/60     | B300/45     | B300/30                 | B300/15     | B300/7.5  | BH300/90                 | BH300/45         | BH300/30  | *BS300/90      | *BS300/45   | *BS300/30 |                           |  |             |  |
| 350             | B350/90     | B350/60     | B350/45     | B350/30                 | B350/15     | B350/7.5  | BH350/90                 | BH350/45         | BH350/30  | *BS350/90      | *BS350/45   | *BS350/30 |                           |  |             |  |
| 400             | B400/90     | B400/60     | B400/45     | B400/30                 | B400/15     | B400/7.5  | BH400/90                 | BH400/45         | BH400/30  | *BS400/90      | *BS400/45   | *BS400/30 |                           |  |             |  |
| 450             | *B450/90    | *B450/60    | *B450/45    | *B450/30                | *B450/15    | *B450/7.5 | S0                       | S0               | S0        | SO             | S0  | S0        |                           |  |             |  |
| 500             | *B500/90    | *B500/60    | *B500/45    | *B500/30                | *B500/15    | *B500/7.5 | S0                       | S0               | S0        | S0             | S0  | S0        |                           |  |             |  |
| 550             | *B550/90    | *B550/60    | *B550/45    | *B550/30                | *B550/15    | *B550/7.5 | S0                       | S0               | S0        | S0             | S0  | S0        |                           |  |             |  |
| S0 = Sp         | ecial Order | (allow 3-5d | ays)        | OD = Outsic             | le Diameter | D =       | Diameter                 | * Segmer         | nted      |                |   |           |                           |  |             |  |

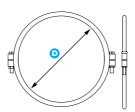
#### \* Seamented

#### CONNECTORS



Our Modular ducting system can easily be connected at installation using the range of connectors below - and easily un-locked for inspection, cleaning or to re-use in a new duct layout.

#### Standard Locks SL 80-400mm





- Low cost, as two halves, nuts and bolts included
- Slim fitting electro galvanised (zinc plated)
- As they tighten, these pull the lips of the duct together to form a 99% airtight seal
- For a complete seal use Rubber gasket rings see page 12

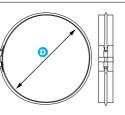


Heavy Standard Locks SLH 100-400mm are available for 2mm heavy duct. Electro galvanised and supplied as 2 halves with nuts, bolts and



Stainless Standard Locks SLS 100-400mm are available for the stainless duct range. Supplied as two halves with nuts and bolts.

#### Wide Locks



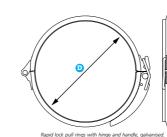


- WL 200-700mm
- As duct diameters increase, so does the weight, and wide locks
- We recommend the use of wide locks rather than standard locks for diameters over 200mm especially for a horizontal duct run



Stainless Wide Locks WLS 250-400mm these are available for use with the stainless duct straights and bends if stainless is required.

#### Lever Locks







- LL 80-550mm
- · Ideal if a section of duct will be taken apart regularly
- Fitted with a wide air tight rubber seal which gives additional support to the duct
- · Strong spring with heavy metal lever handle allows it to be opened manually with ease
- 450mm and over have a bolt type opening.



Heavy Lever Locks LLH 80-200mm are available for use with 2mm Heavy Duty duct range (above 400 uses



Stainless Lever Locks LLS 80-250mm are available for the Stainless Duct system – these are fitted with Food Grade silicon seals suitable for temperatures up



Lever Locks for Seed Duct - available for use with the 160mm Seed Duct range, the profile on these quick releasing Lever Locks ensures an air tight seal.



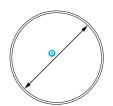


EASY TO UNLOCK FOR INSPECTION OR CLEANING

**EASY TO REUSE** 

**EXCELLENT SEAL RIGIDITY** 

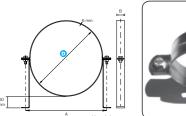
#### RUBBER GASKET RINGS





- DES 80-300mm (Duct End Seal)
- Made from EPDM rubber
- Use in conjunction with Standard Lock to give improved seal
- Fit seal over lip of one end of duct and connect as normal
- Use only ONE rubber ring per connection

#### HANGING BRACKETS



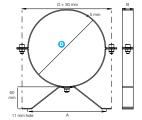


- HB 80-300mm 1mm steel thick
- HB 350-550mm 3mm steel thick
- Made to suit each duct diameter
- 2 semi circular rings that bolt together around duct
- Bracket can be connected to 'legs' for wall or floor or a threaded rod to hang from roof
- Complete with all nuts and bolts
- Legs order as seperate item to bracket

#### Stainless Hanging Brackets

HBS 100,150,200 available for stainless range

#### WALL BRACKET LEGS





- WBL for duct diameter 80-500mm
- WBL160 for duct diameter 80-160mm
- WBL300 for duct diameter 180-300mm
- Order WBL350, WBL400, WBL450, WBL500 for these specific sizes
- Used to support Hanging Brackets or off set duct from a wall
- Larger sizes can be purchased as Special Order

#### WELDING ENDS





- WEH 80-400mm
- 2mm steel plate untreated s=2mm
- Designed to connect straight edge weld or pipe to our Lip Lock modular system
- Weld flat end on to existing system the other end has our standard lip to lock onto any of our range

#### HOSE SPIGOTS







- Use to join flex to modular Lip Lock galvanised duct system
- One end has 5mm lip to lock with connector of choice.
- · Feature raised ring to give improved hold for flex

#### END DISC





- These blanks close off unused duct runs
- Fit End Discs with Standard Locks or Lever Locks

#### **FLANGES**





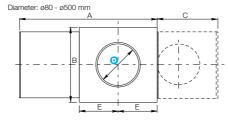


| Duct<br>Run | D mm | D1 mm | D2 mm | Thickness | Width<br>mm | Size<br>mm | of<br>Holes |
|-------------|------|-------|-------|-----------|-------------|------------|-------------|
| 100         | 103  | 135   | 153   | 3.00      | 25          | 9          | 8           |
| 125         | 128  | 160   | 178   | 3.00      | 25          | 9          | 8           |
| 150         | 155  | 185   | 205   | 5.00      | 25          | 9          | 8           |
| 180         | 185  | 215   | 235   | 5.00      | 25          | 9          | 8           |
| 200         | 205  | 235   | 255   | 5.00      | 25          | 9          | 12          |
| 250         | 255  | 285   | 305   | 5.00      | 25          | 9          | 12          |
| 300         | 305  | 336   | 355   | 5.00      | 25          | 9          | 12          |
| 350         | 355  | 389   | 415   | 6.00      | 26          | 11         | 12          |
| 400         | 405  | 439   | 465   | 6.00      | 30          | 11         | 16          |

- Made from hot galvanised flat iron or supplied untreated
- s= thickness in mm and varies with Diameter

## **BLAST GATES (DAMPERS)**

#### Manually Operated Blast Gates



Designed to close off the airflow to one duct at a time allowing the remaining duct system to get the benefit of the increased suction



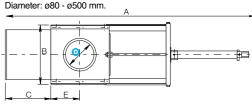
- Close by hand but rely on staff remembering to reopen the closed gate when machines are turned back on
- Sealed Manually operated Blast Gates available by special order (Air freight 2 weeks, Sea freight 10 weeks)





- Sealed Stainless Steel Blast Gates BGSS100-400 - All stainless steel Blast Gates are sealed (B)
- Blast Gates with Flexible Hose spigots (Hose Tails) Standard Galvanised BGHT80-150 (C)

#### **Pneumatic Blast Gates**





#### Standard Galvanised BG80SP-BG600SP

- Are like the manual version but are connected to the machine ON/OFF switch
- Supplied with pneumatic cylinder but no Solenoid (due to the permutations of voltage possibilities)
- Manufactured from 0.9mm Galvanised sheet metal with a 2mm Damper (Steel plate)



#### Seed Duct Range Blast Gates

Available for 160mm Seed Duct

| eter     | Manually Operated Blast Gates (mm) |      |      | Manually Op Manually Op |     | Pneumatically Operated (mm) |                               |                             |         |      |      |     |     |     |
|----------|------------------------------------|------|------|-------------------------|-----|-----------------------------|-------------------------------|-----------------------------|---------|------|------|-----|-----|-----|
| Diameter |                                    | S1   | A    | В                       | С   | E                           | With Flexible<br>Hose Spigots | Stainless Steel<br>(Sealed) |         | S1   | А    | В   | С   | E   |
| 80       | BG80                               | 1.25 | 255  | 145                     | 105 | 75                          | BGHT80                        | S0                          | BG80SP  | 1.25 | 550  | 145 | 100 | 75  |
| 100      | BG100                              | 1.25 | 340  | 185                     | 150 | 95                          | BGHT100                       | BGSS100                     | BG100SP | 1.25 | 800  | 185 | 160 | 95  |
| 125      | BG125                              | 1.25 | 340  | 185                     | 150 | 95                          | BGHT125                       | S0                          | BG125SP | 1.25 | 800  | 185 | 160 | 95  |
| 140      | BG140                              | 1.25 | 405  | 225                     | 175 | 115                         | S0                            | S0                          | S0      | 1.25 | 975  | 225 | 200 | 155 |
| 150      | BG150                              | 1.25 | 405  | 225                     | 175 | 115                         | BGHT150                       | BGSS150                     | BG150SP | 1.25 | 975  | 225 | 200 | 115 |
| 160      | BG160                              | 1.25 | 405  | 225                     | 175 | 115                         | S0                            | S0                          | S0      | 1.25 | 975  | 225 | 200 | 115 |
| 180      | BG180                              | 1.25 | 525  | 295                     | 225 | 150                         | S0                            | S0                          | BG180SP | 1.25 | 1180 | 295 | 250 | 150 |
| 200      | BG200                              | 1.25 | 525  | 295                     | 225 | 150                         | S0                            | BGSS200                     | BG200SP | 1.25 | 1180 | 295 | 250 | 150 |
| 225      | BG225                              | 1.5  | 590  | 325                     | 270 | 160                         | S0                            | S0                          | S0      | 1.5  | 1365 | 325 | 300 | 160 |
| 250      | BG250                              | 1.5  | 650  | 350                     | 300 | 175                         | S0                            | S0                          | BG250SP | 1.5  | 1390 | 350 | 300 | 175 |
| 275      | BG275                              | 1.5  | 705  | 380                     | 325 | 190                         | S0                            | S0                          | BG275SP | 1.5  | 1725 | 380 | 400 | 190 |
| 300      | BG300                              | 1.5  | 755  | 400                     | 345 | 205                         | S0                            | S0                          | BG300SP | 1.5  | 1750 | 400 | 400 | 205 |
| 350      | BG350                              | 1.5  | 885  | 450                     | 435 | 200                         | S0                            | S0                          | BG350SP | 1.5  | 2000 | 450 | 400 | 200 |
| 400      | BG400                              | 1.5  | 960  | 500                     | 460 | 250                         | S0                            | S0                          | BG400SP | 1.5  | 2150 | 500 | 500 | 250 |
| 450      | BG450                              | 1.5  | 1050 | 550                     | 500 | 275                         | S0                            | S0                          | S0      | 1.5  | 2225 | 550 | 500 | 275 |
| 500      | BG500                              | 1.5  | 1160 | 600                     | 550 | 300                         | S0                            | S0                          | S0      | 1.5  | 2575 | 600 | 600 | 300 |

SO = Special Order (allow 3-5days)

L=130mm on all sizes

Sliding Damper = 2mm galvanised steel on ALL blastgates

#### **BRANCH PIECES**



- Usually 30° angle to give least turbulence to air flow
- Regular sizes in stock ie 100-100-100, 350-350-350
- Any other size manufactured locally allow 2-3 days depending on quantity

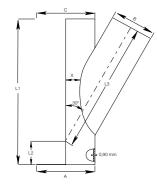


#### Reducing Branch Pieces

- Use when 2 sections of duct join
- Joining 2 sections of duct usually results in added airflow, so the size of continuing duct should increase. Use a reducing branch piece at this point
- Manufactured to order
- Allow us to assist in calculating required sizes
- Saves cost of separate reducers



## **DUCT ENTRIES (SADDLES)**

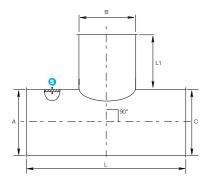




- Manufactured to order
- Advise main duct size and joining duct size



#### T PIECES



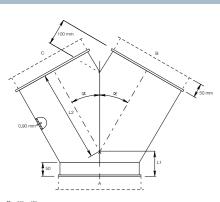
#### TP80-200

- Available in standard sizes s= 0.9mm
- Other sizes manufactured to order
- $\bullet~$  T pieces introduce air flow at 90° we recommend using Branch pieces (30°) if possible

|       | A=B=C mm | L = mm | L1 = mm |
|-------|----------|--------|---------|
| TP80  | 80       | 230    | 75      |
| TP100 | 100      | 250    | 75      |
| TP125 | 125      | 275    | 75      |
| TP150 | 150      | 300    | 75      |
| TP200 | 200      | 350    | 75      |



### Y PIECES (TROUSER LEGS)



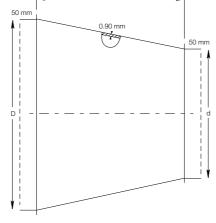
- Give both airflows equal priority and use to join two ducts of equal size
- Standard sizes 'off shelf' stock ie 80-80-80, 250-250-250, s = 0.9mm
- · Other sizes manufactured to order

|       | A=B=C mm |
|-------|----------|
| YP80  | 80       |
| YP100 | 100      |
| YP125 | 125      |
| YP150 | 150      |
| YP180 | 180      |
| YP200 | 200      |
| YP250 | 250      |



#### REDUCING CONES/REDUCERS



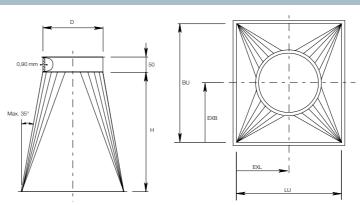




- s =0.9mm
- Listed sizes available off shelf, overnight
- Other sizes manufactured to order, 3-4 days

|           | D mm | d = mm |
|-----------|------|--------|
| RC100-80  | 100  | 80     |
| RC125-100 | 125  | 100    |
| RC125-80  | 125  | 80     |
| RC150-125 | 150  | 125    |
| RC150-100 | 150  | 100    |
| RC150-80  | 150  | 80     |
| RC180-150 | 180  | 150    |
| RC180-125 | 180  | 125    |
| RC200-180 | 200  | 180    |
| RC200-150 | 200  | 150    |
| RC200-125 | 200  | 125    |
| RC200-100 | 200  | 100    |
| RC200-80  | 200  | 80     |
| RC225-200 | 225  | 200    |
| RC250-225 | 250  | 225    |
| RC250-200 | 250  | 200    |
| RC250-150 | 250  | 150    |
| RC250-100 | 250  | 100    |
| RC300-250 | 300  | 250    |
| RC300-125 | 300  | 125    |
| RC300-100 | 300  | 100    |
| RC400-350 | 400  | 350    |

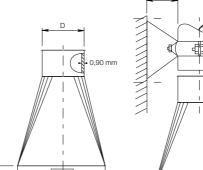
#### SQUARE TO ROUNDS

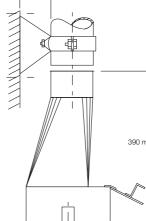


- Usually required above hoods, or fans
- Manufactured to order please provide round duct internal diameter, size of square or oblong and required flange width



#### FLOOR SWEEPS





- Fitted with grill to prevent large items entering which may cause damage to duct system
- Ideal for schools, small joinery workshops and factories
- Popular sizes in stock (s = 0.9mm) and others available by Special Order

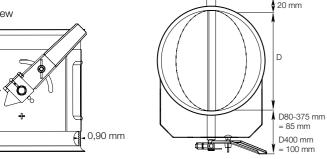


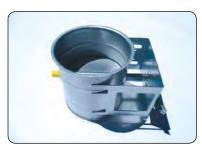


#### THROTTLE VALVES









#### Galvanised Throttle Valves

- TV80-450
- Butterfly valves to regulate the air flow
- Pneumatic Electric Throttle valves available by Special Order

#### Stainless Throttle valves

• TVS080-200

| ster     | Thro  | ttle Valves Stan | dard            |  |
|----------|-------|------------------|-----------------|--|
| Diameter |       | L (mm)           | Stainless Steel |  |
| 80       | TV80  | 125              | TVS080          |  |
| 100      | TV100 | 125              | TVS100          |  |
| 125      | TV125 | 135              | S0              |  |
| 140      | TV140 | 170              | S0              |  |
| 150      | TV150 | 170              | TVS150          |  |
| 160      | TV160 | 170              | S0              |  |
| 180      | TV180 | 210              | S0              |  |
| 200      | TV200 | 210              | TVS200          |  |
| 225      | TV225 | 240              | S0              |  |
| 250      | TV250 | 265              | S0              |  |
| 275      | TV275 | 290              | S0              |  |
| 300      | TV300 | 315              | S0              |  |
| 350      | TV350 | 365              | S0              |  |
| 400      | TV400 | 415              | S0              |  |
| 450      | TV450 | 465              | S0              |  |

SO = Special Order (allow 3-5days)

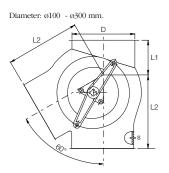
## **DIVERTER VALVES - BRANCH TYPE**

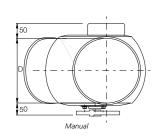




#### DVBM80-250

- Divert duct into choice of two eg. fitted as a switch for two filter points or bag filling positions
- Manually operated but can be fitted with Pneumatics or specially ordered
- Damper suspended on brass bearings
- Branch at 60° angle, supplied with LEFT branch
- Powder coated steel





| eter     | Dive    | Diverter Valves Branch Type – 60° Manual |     |     |  |  |  |  |  |  |
|----------|---------|--|-----|-----|--|--|--|--|--|--|
| Diameter |         | S1                                       | С   | E   |  |  |  |  |  |  |
| 80       | S0      |  |     |     |  |  |  |  |  |  |
| 100      | DVBM100 | 1.5                                      | 70  | 145 |  |  |  |  |  |  |
| 125      | DVBM125 | 1.5                                      | 90  | 170 |  |  |  |  |  |  |
| 140      | S0      |  |     |     |  |  |  |  |  |  |
| 150      | DVBM150 | 2.0                                      | 100 | 190 |  |  |  |  |  |  |
| 160      | S0      |  |     |     |  |  |  |  |  |  |
| 180      | DVBM180 | 2.0                                      | 195 | 315 |  |  |  |  |  |  |
| 200      | DVBM200 | 2.0                                      | 110 | 230 |  |  |  |  |  |  |
| 225      | S0      |  |     |     |  |  |  |  |  |  |
| 250      | DVBM250 | 2.0                                      | 135 | 270 |  |  |  |  |  |  |
| 275      | S0      |  |     |     |  |  |  |  |  |  |
| 300      | DVBM300 | 2.0                                      | 160 | 325 |  |  |  |  |  |  |
| 350      | S0      |  |     |     |  |  |  |  |  |  |
| 400      | S0      |  |     |     |  |  |  |  |  |  |
| 450      | S0      |  |     |     |  |  |  |  |  |  |

SO = Special Order (allow 3-5days)

#### FANS - IN STOCK

- Manufactured by JKF Industri Denmark
- All fan noise and pressure Graphs available by ringing 0508 69 38 28 or download directly from www.jkf.dk
- All fans finished in blue (RAL 5010) powder paint min 80µm over primer 70µm



#### Material Handling Direct Drive

- Stocked in New Zealand for overnight delivery (allow 2-3 days South Island)
- Direct Drive fans designed for material handling
- Self cleaning impellors with backward inclined blades statically and dynamically balanced

| Model Number | Inlet Size<br>mm | Motor Size<br>kW | Max<br>RPM | Air Volume<br>m³/h  | Pressure<br>mmWG | Power Supply | Delivery  |  |
|--------------|------------------|------------------|------------|---------------------|------------------|--------------|-----------|--|
| FAN JK20D    | 220              | 1.1              | 3,200      | 750-1,800           | 110-155          | 230V-50Hz    | 8 weeks*  |  |
| FAN JK22D    | 250              | 2.2              | 3,200      | 1,000-3,100 130-200 |                  | 230V-50Hz    | Overnight |  |
| FAN JK25D    | 250              | 4                | 3,200      | 1,500-4,500         | 160-240          | 400V-50Hz    | Overnight |  |
| FAN JK30D    | 300              | 5.5 or 7.5       | 3,200      | 2,500-6,500 200-290 |                  | 400V-50Hz    | Overnight |  |
| FAN JK35D    | 350              | 11 or 15         | 3,200      | 3,000-8,500         | 260-375          | 400V-50Hz    | Overnight |  |
| FAN JK40D    | 400              | 18.5 or 22       | 3,200      | 5,000-11,000        | 340-440          | 400V-50Hz    | Overnight |  |

## FANS AVAILABLE BY SPECIAL ORDER (3 TO 8 WEEKS DELIVERY)



#### Clean Air Direct Drive

- Designed for transport of clean air, or as fan from negative pressure filters
- With backward inclined blades statiocally and dynamically balanced

| Model Number | Inlet Size<br>mm | Motor Size<br>kW | Max<br>RPM | Air Volume<br>m³/h | Pressure<br>mmWG | Power Supply  | Delivery  |
|--------------|------------------|------------------|------------|--------------------|------------------|---------------|-----------|
| FAN 30MTD    | 300              | 4                | 3,575      | 2,000-6,000        | 120-330          | 230/400V 50Hz | 3-8 weeks |
| FAN 40MTD    | 400              | 11               | 3,575      | 2,500-14,000       | 120-460          | 400/690V 50Hz | 3-8 weeks |
| FAN 50MTD    | 500              | 18.5             | 3,575      | 2,500-22,000       | 160-590          | 400/690V 50Hz | 3-8 weeks |



#### Material Handing Indirect Drive

| Model Number | Inlet Size<br>mm | Motor Size<br>kW | Max<br>RPM |               |         | Power Supply | Delivery  |  |
|--------------|------------------|------------------|------------|---------------|---------|--------------|-----------|--|
| FAN 45K      | 450mm            | 18.5kw-30kw      | 2,450      | 6,000-20,000  | 180-520 | 400V 50Hz    | 3-8 weeks |  |
| FAN 55K      | 550mm            | 30kw -55kw       | 2,350      | 8,000-29,000  | 160-600 | 400V 50Hz    | 3-8 weeks |  |
| FAN 75K      | 750mm            | 55kw-75kw        | 2,050      | 25,000-40,000 | 200-370 | 400V 50Hz    | 3-8 weeks |  |



#### Fans for concentrated handling over long distances

| Model Number | Inlet Size<br>mm | Motor Size<br>kW | Max<br>RPM | Air Volume<br>m³/h | Pressure<br>mmWG | Power Supply | Delivery  |  |
|--------------|------------------|------------------|------------|--------------------|------------------|--------------|-----------|--|
| FAN T200K    | 200mm            | 15kw-22kw        | 2,900      | 2,000-5,500        | 250-750          | 400V 50Hz    | 3-8 weeks |  |
| FAN T300K    | 300mm            | 22kw-37kw        | 2,900      | 5,000-13,000       | 350-1,000        | 400V 50Hz    | 3-8 weeks |  |



#### Clean Air Indirect fans

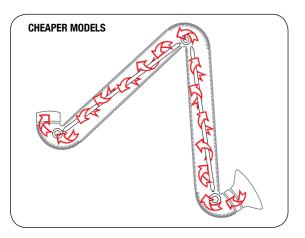
| Model Number        | Inlet Size<br>mm | Motor Size<br>kW | Max Air Volume<br>RPM m³/h |              | Pressure<br>mmWG | Power Supply | Delivery  |
|---------------------|------------------|------------------|----------------------------|--------------|------------------|--------------|-----------|
| FAN 60/70/80/90 MTD | 600-900mm        | 45kw -90kw       | 1770-1800                  | 4,000-76,000 | 180-550          | 400V 50Hz    | 3-8 weeks |

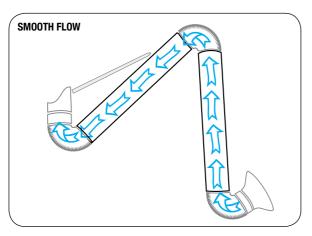


#### High Pressure fans for transport of grain or similar with density of 0.2 to 1.2 tons/m<sup>3</sup>

| Model Number                   | Duct Size<br>mm | Motor Size<br>kW |       |  | Pressure<br>mmWG | Power Supply | Delivery  |
|--------------------------------|-----------------|------------------|-------|--|------------------|--------------|-----------|
| FAN 2/HT 4HT 5HT 7HT 10HT 15HT | 160mm           | 1.5KW -11KW      | 2,850 |  | 250-1,300        | 400V 50Hz    | 3-8 weeks |

#### FUMES ARMS - SMOOTH FLOW







- External joints allow smooth air flow and lower static pressure
- No internal build up on hinges etc
- European quality with durable external cast aluminium joints
- Damper included on all models
- Self supporting, easy to position pivotal joints -top 360deg swivel with safety stop

#### Standard

- Heavy Duty Galvanised tubes powder coated in blue
- Metal Hoods (Aluminium) powder coated in yellow

#### Stainless Steel

- Stainless Steel 304 Hood
- Stainless Steel 304 Tubes



|              | Tube Diam<br>mm | Hood Diam<br>mm | Horizontal Reach<br>mm | Vertical Reach<br>mm |
|--------------|-----------------|-----------------|------------------------|----------------------|
| STANDARD     |                 |                 |                        |                      |
| FUME 075/1.5 | 75              | 160             | 1515                   | 1600                 |
| FUME100/2    | 100             | 200             | 2000                   | 2125                 |
| FUME125/3    | 125             | 250             | 2745                   | 2930                 |
| FUME160/3    | 160             | 315             | 2830                   | 3010                 |
| FUME160/4    | 160             | 315             | 3630                   | 3810                 |
| STAINLESS    |                 |                 |                        |                      |
| FUMESS100/2  | 100             | 200             | 2000                   | 2125                 |
| FUMESS125/3  | 125             | 250             | 2745                   | 2930                 |
| FUMESS160/3  | 160             | 315             | 2830                   | 3010                 |





#### **FUME BOOM**



- Extension booms, fold flat against the wall, capable of 2/3/4m reach
- Can support Fume Arms to give radius reach of up to 8 metres

#### **FUME CUBE**



- · Designed to filter dry impurities in welding, grinding/ polishing metals, plastics
- Ideal where continuous use is not required
- Very quiet operation
- Strong welded steel housing
- Aluminium mesh pre- filter which protects cartridge from sparks
- Replaceable cellulose main cassette filter (Class 7) recommended for 500 hour life
- Easy to position (castor wheels including locks)
- Use with Standing Fume Arm 160mm mounted on top of unit
- 1000m³ at hood
- 1.1kW motor included
- Requires 3 phase supply



#### **FUME ARM FANS**



- Designed for non-explosive and chemically neutral air and gas.
- European quality powder coated welded sheet iron
- Aluminium impellers mounted directly on motor shaft
- 0.7kw motor for use with 160mm Fume Arm
- Includes fan inlet connection collar and wall mount bracket
- Very quiet can be mounted inside or outside working area
- Requires 3 phase supply

#### GARAGE EXHAUST REELS



- Ideal for extraction of car and truck exhaust gases at tailpipe in conjunction with Duct/Fan extract system
- Suitable for Vehicle Service garages
- Flexible hose allows extraction of gas and air mixture to max. temperature 150° (or intermittently to 170°C)
- A spring mechanism is housed in one of the steel reel side plates which allows the flex to be unrolled easily
- Flex automatically retracts
- Stainless Steel Nozzle
- Sizes 100 | 150 | 200 DIA (special order)

# WHEN ONLY THE BEST FLEX WILL DO

We source our flex from Germany for optimum quality and performance. With high quality production control, the best raw materials, and a wide range of sizes, means our range of flexible ducting will meet most fume extraction needs.

Our well earned reputation for providing quality flex means that our customers continually return to us they buy 'our' flex because it lasts.

Most of our flex products are designed to be as smooth as possible on the inside to promote easy airflow and discourage particle entrapment.





#### Antistatic Range

All the flex in our Antistatic Polyester Polyurethane range is naturally antistatic ie. the static charge flows through the material itself. Because it is manufactured with a compound within the actual wall material, the usual need to earth the helix wire is not as essential as any static build up will discharge to ground via the connecting metal components. We recommend you earth the helix wire for added protection in very dry conditions.

Polyester polyurethane flex is generally more resistant to abrasion, chemicals and is lighter than similar diameter PVC flex, but the biggest advantage is you will not receive a 'belt' from touching it.

Antistatic flex should always be chosen where potentially explosive material eg. sawdust, flour, sugar are being extracted.









#### Minimum Order

The range is mostly available in 10m lengths and there are discounts for purchasing complete coils or 10 metre rolls.

We cut in whole metre increments ie 1m, 2m, 6m etc.

#### **Returns Policy**

We will always endeavour to assist you in choosing the best flex to meet your needs when you place your order, however we regret we cannot accept returns of flex once it has been dispatched. Flex can be damaged invisibly and it is our policy that every customer should receive their flex in excellent ex-factory condition.

#### Why buy our flex?

- Feel the World Leading Quality
- Wide range with flex available for specific applications
- Overnight Delivery (large diameters to South Island allow 2-3 days)
- Because you need it to last!

#### WORKING PRESSURE/VACUUM CHARTS

#### Maximum Working Pressure (Bar)

| Diam mm |       | Antis  | tatic Polyure | thane    |      |       | PVC-CLEAR | R         | Food  | Garage | Chem/        | High Temp |
|---------|-------|--------|---------------|----------|------|-------|-----------|-----------|-------|--------|--------------|-----------|
| ID      | Light | Medium | Heavy         | Xtra Hvy | CNC  | Light | Heavy     | Agri Flex | Grade | Flex   | Fume<br>Flex | Flex      |
| 25      | 0.65  | 1.65   |               |          |      | 0.45  | 1.70      |           | 1.65  |        |              |           |
| 32      | 0.60  |        | 2.10          |          |      | 0.40  |           |           | 1.50  |        | 0.40         |           |
| 40      | 0.50  | 1.40   | 2.00          | 2.30     |      | 0.40  | 1.40      |           | 1.40  |        | 0.35         |           |
| 52      | 0.40  | 1.30   | 1.80          |          |      | 0.35  | 1.30      |           | 1.30  |        | 0.35         | 0.85      |
| 63      | 0.40  | 1.10   | 1.60          |          |      | 0.35  | 1.10      |           |       |        | 0.35         | 0.68      |
| 76      | 0.30  | 0.80   | 1.40          |          |      | 0.30  | 1.00      | 1.10      | 0.80  |        | 0.20         | 0.47      |
| 82      | 0.28  | 0.70   | 1.20          |          |      | 0.25  | 0.80      | 1.00      | 0.70  |        | 0.20         | 0.43      |
| 90      |       | 0.65   |               |          |      |       |           |           |       |        |              |           |
| 102     | 0.20  | 0.60   | 1.00          | 1.10     |      | 0.20  | 0.60      | 1.00      | 0.60  | N/A    | 0.15         | 0.30      |
| 110     |       |        |               |          |      |       | 0.50      |           |       |        |              |           |
| 120     | 0.20  | 0.50   |               |          |      |       |           |           |       |        |              |           |
| 127     | 0.20  | 0.40   | 0.75          |          |      | 0.15  | 0.40      | 0.70      | 0.40  |        | 0.13         | 0.21      |
| 140     | 0.15  | 0.30   | 0.60          |          |      |       |           |           |       |        |              |           |
| 152     | 0.10  | 0.25   | 0.50          | 0.70     |      | 0.08  | 0.25      | 0.50      | 0.25  |        | 0.11         | 0.16      |
| 160     | 0.09  | 0.25   | 0.50          |          |      |       |           |           |       |        |              |           |
| 180     | 0.09  | 0.25   | 0.45          |          | 0.22 | 0.06  | 0.25      | 0.40      |       |        | 0.09         |           |
| 203     | 0.08  | 0.20   | 0.35          |          | 0.20 | 0.05  | 0.20      |           | 0.20  |        | 0.08         | 0.10      |
| 229     | 0.06  | 0.20   | 0.30          |          |      | 0.04  |           |           |       |        |              |           |
| 254     | 0.05  | 0.15   | 0.25          |          | 0.15 | 0.03  | 0.15      |           |       |        | 0.07         | 0.70      |
| 279     | 0.04  | 0.13   |               |          |      |       |           |           |       |        |              |           |
| 305     | 0.03  | 0.12   | 0.20          |          |      | 0.03  |           |           |       |        | 0.05         |           |
| 356     | 0.02  | 0.10   | 0.15          |          |      | 0.02  |           |           |       |        | 0.04         |           |
| 406     | 0.02  | 0.08   | 0.10          |          |      | 0.02  |           |           |       |        | 0.04         |           |
| 457     | 0.01  |        |               |          |      | 0.01  |           |           |       |        | 0.03         |           |
| 508     | 0.01  |        |               |          |      | 0.01  |           |           |       |        | 0.03         |           |

#### Maximum Vacuum (Bar)

| Diam mm |       | Antis  | tatic Polyure | thane    |     |       | PVC-CLEAR | R         | Food  | Garage | Chem/        | High Temp |
|---------|-------|--------|---------------|----------|-----|-------|-----------|-----------|-------|--------|--------------|-----------|
| ID      | Light | Medium | Heavy         | Xtra Hvy | CNC | Light | Heavy     | Agri Flex | Grade | Flex   | Fume<br>Flex | Flex      |
| 25      | 0.30  | 0.40   |               |          |     | 0.22  | 0.45      |           | 0.40  |        |              |           |
| 32      | 0.30  |        | 0.50          |          |     | 0.20  |           |           | 0.35  |        | 0.20         |           |
| 40      | 0.25  | 0.30   | 0.45          | 0.70     |     | 0.18  | 0.30      |           | 0.30  |        | 0.15         |           |
| 52      | 0.20  | 0.28   | 0.40          |          |     | 0.15  | 0.28      |           | 0.28  |        | 0.10         | 0.32      |
| 63      | 0.16  | 0.25   | 0.35          |          |     | 0.14  | 0.25      |           |       |        | 0.08         | 0.22      |
| 76      | 0.14  | 0.20   | 0.35          |          |     | 0.10  | 0.20      | 0.15      | 0.20  |        | 0.07         | 0.14      |
| 82      | 0.10  | 0.18   | 0.30          |          |     | 0.09  | 0.18      | 0.15      | 0.18  |        | 0.06         | 0.13      |
| 90      |       | 0.16   |               |          |     |       |           |           |       |        |              |           |
| 102     | 0.09  | 0.15   | 0.30          | 0.40     |     | 0.08  | 0.15      | 0.13      | 0.15  | 0.10   | 0.05         | 0.08      |
| 110     |       |        |               |          |     |       | 0.14      |           |       |        |              |           |
| 120     | 0.08  | 0.15   |               |          |     |       |           |           |       |        |              |           |
| 127     | 0.08  | 0.12   | 0.25          |          |     | 0.06  | 0.12      | 0.11      | 0.12  |        | 0.04         | 0.05      |
| 140     | 0.06  | 0.12   | 0.20          |          |     |       |           |           |       |        |              |           |
| 152     | 0.06  | 0.10   | 0.20          | 0.20     |     | 0.05  | 0.10      | 0.10      | 0.10  |        | 0.04         | 0.04      |
| 160     | 0.06  | 0.10   | 0.18          |          |     |       |           |           |       |        |              |           |
| 180     | 0.05  | 0.10   | 0.15          |          | 0.9 | 0.04  | 0.10      | 0.10      |       |        | 0.03         |           |
| 203     | 0.05  | 0.09   | 0.12          |          | 0.8 | 0.03  | 0.09      |           | 0.09  |        | 0.02         | 0.02      |
| 229     | 0.04  | 0.09   | 0.10          |          |     | 0.03  |           |           |       |        |              |           |
| 254     | 0.04  | 0.06   | 0.10          |          | 0.6 | 0.03  | 0.08      |           |       |        | 0.02         | 0.01      |
| 279     | 0.03  | 0.06   |               |          |     |       |           |           |       |        |              |           |
| 305     | 0.03  | 0.06   | 0.09          |          |     | 0.02  |           |           |       |        | 0.01         |           |
| 356     | 0.02  | 0.04   | 0.09          |          |     | 0.02  |           |           |       |        | 0.01         |           |
| 406     | 0.02  | 0.03   | 0.08          |          |     | 0.01  |           |           |       |        | 0.01         |           |
| 457     | 0.01  |        |               |          |     | 0.01  |           |           |       |        | 0.01         |           |
| 508     | 0.01  |        |               |          |     | 0.01  |           |           |       |        | 0.01         |           |
| 508     | 0.01  |        |               |          |     | 0.01  |           |           |       |        | 0.03         |           |
| 508     | 0.01  |        |               |          |     | 0.01  |           |           |       |        | 0.03         |           |



#### **POLY LIGHT**

Colour

Uses

POLYLGHT025-POLYLGHT508

Temperature Range -40° - 100°C Polyester Polyurethane

Description Wall Thickness

Clear with copper wire helix

• Ideal for fumes, powders and fine sawdust etc

Excellent flexibility

• Antistatic R<108 Ohm – normally no need to ground wire

WITH OUR ANTISTATIC FLEX, THE STATIC CHARGE FLOWS THROUGH THE MATERIAL ITSELF.



#### **POLY MEDIUM**

Code

POLYMED025-POLYMED406

Temperature Range -40° - 100°C Description

Polyester Polyurethane

Wall Thickness

Colour

Uses

0.5mm<100mm, 100mm and over 0.6mm

Opaque with white coated wire helix

• Ideal for light materials, paper, sawdust, shavings

General transport of particles

· Smooth bore

• Antistatic R<108 Ohm – normally no need to ground wire

WITH OUR ANTISTATIC FLEX, THE STATIC CHARGE FLOWS THROUGH THE MATERIAL ITSELF.



#### **POLY HEAVY**

Code Temperature Range Description

Wall Thickness

POLYHVY032-POLYHVY406

-40° - 100°C Polyester Polyurethane

<100mm 0.9mm

100-203mm 1.1mm 250mm and over 1.3mm

Colour Uses

Opaque with cream wire helix

 Ideal for suction and transport of abarasive materials

• Transport of granules, wood chip and grain

• Ideal for industrial sweepers, lawn mowers

Smooth bore

• Antistatic R<10<sup>8</sup> Ohm – normally no need to ground wire

WITH OUR ANTISTATIC FLEX, THE STATIC CHARGE FLOWS THROUGH THE MATERIAL ITSELF.



#### **POLY EXTRA HEAVY**

Code Temperature Range -40° - 100°C

Uses

POLYEXTRAHV040,100,150

Description

Polyester Polyurethane

Wall Thickness

Colour Opaque with green helix

Ideal for transport of air, fumes, wood chips.

grain and other very abrasive materials

• Good for transport under high vacuum/ pressure

Good resistance to oil and petrol

Smooth bore

Antistatic R<10<sup>8</sup> Ohm

WITH OUR ANTISTATIC FLEX, THE STATIC CHARGE FLOWS THROUGH THE MATERIAL ITSELF.



#### **CNC FLEX**

Description

Colour

Uses

Wall Thickness

Code CNCPOLY180,200,250

Temperature Range

-40° - 100°C Polyester Polyurethane

0.8mm

Opaque with wide spaced cream helix

· specially designed for movement of woodworking CNC machines

Very flexible but durable

Does not implode under CNC suction

• Smooth bore – good abrasion resistance

Antistatic R<10<sup>8</sup> Ohm

WITH OUR ANTISTATIC FLEX, THE STATIC CHARGE FLOWS THROUGH THE MATERIAL ITSELF.



#### **HOSE CLAMPS**

WDCS 80-300 Code Temperature Range -60-300°C

Description Stainless Steel 304 Notes Can be ordered to fit flex size



#### **CLEAR LIGHT**

Code CLEAR025-CLEAR508

Temperature Range 0° - 70°C Description PVC

0.4mm

Clear with wire helix

• Ideal for suction of fumes, light fibres, air conditioning and ventilation, protecting cables

· Excellent flexibility

Excellent compressibility



#### **CLEAR HEAVY**

Colour

Uses

CLEARHVY025-CLEARHVY254 Code

Temperature Range 0° - 70°C Description PVC Wall Thickness 0.8mm

Clear with white coated wire helix

- Ideal for industrial vacuum cleaners, material handling conduit and protection
- · Very versatile and solid construction
- Smooth bore



#### FOOD GRADE FLEX - FDA/EU APPROVED

FOOD025-FOOD203 Code Temperature Range -40° - 100°C

Description Wall Thickness Colour

POLYETHER - POLYURETHANE

<100mm 0.5mm, 100-203mm 0.6mm Clear with white coated wire helix

- Ideal for suction and conveyance of food powders and products
- Material is FDA and EU approved for food use
- · Resistant to microbes and hydrolysis
- Non toxic
- · Non anitistatic



#### HIGH TEMPERATURE FLEX

HIGHTEMP052 - HIGHTEMP254 Code Temperature Range -60° - 300°C Description

Wall Thickness Colour

Uses

Silicon coated glass fabric with external helix 0.4mm

Silver with steel external helix

- · Ideal for suction of hot gases in all fields of industry, glass, plastic moulding, hot exhausts,
- Light weight and very flexible
- Good temperature, UV and ozone resistance
- Flame retardant, excellent axial compressibility

#### **CHEM/FUME FLEX**

Code Temperature Range -40° - 150°C Description

Uses

UV032-UV508

Wall Thickness Colour

TPE COATED POLYESTER 0.4mm

- Ideal for suction of chemical fumes and gases, air conditioning, vehicle construction
- Very good resistance to acids, UV, Ozone resistant, rot proofed
- · Withstands severe flexing



#### **AGRI FLEX**

Code Temperature Range 0° - 60°C Description

Wall Thickness

AGRIFLEX075-AGRIFLEX180

PVC

< 150mm 1.0mm

150mm 1.1mm 180mm 1.2mm

Colour Uses

Grey with rigid PVC helix ie no metal wire

- Ideal for transport of fertilisers, air, suction of light vine leaves
- Smooth bore
- Medium weight and solid



#### **GARAGE FLEX**

Code

**Temperature Range** -40° - 150°C Intermittent to 170°C Description

Wall Thickness

Colour

Uses

GARAGE075, 102, 150

TPE Coated Polyester,

Helix PA6.6 Heat Stabilized 0.4mm

Black with black wear strip ie no metal

- Ideal for suction of exhaust gases
- Excellent chemical resistance especially against oil and petrol fumes
- Crush recoverable
- Ideal for over the floor applications with reel systems

# OUR BUSINESS IS IN PROVIDING THE PARTS THAT GIVE YOU THE BEST SOLUTION

New Zealand Duct & Flex are committed to assisting you find the solution to your individual installation requirements. Please ask us how we can help you.



New Zealand Duct & Flex 13F Saleyards Road, Otahuhu, Auckland 1062

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