

## **Giving Power To You!**

#### **Our Vision**

To **improve** the technical standard of the compressor industry in Southern Africa. This will be achieved by **sharing the knowledge and experience** gained over many years in the industry, with any interested parties.



#### What We Do

Design and manufacture of Air Compressors.

Design of layout and installation of Air Line Systems.

Design and manufacture of pneumatically operated production machines.

Repair and maintenance of all of the above.

Calculators for Pressure Drop, Dew Point and Compressor Output.

We at **Airpower** believe that all contact with **Airpower** should be a positive experience for our customers. All our business actions are conducted with **total customer satisfaction** in mind. The commitment to live up to your expectations and treat you, the customer, in the same way as we would like to be treated, starting from top management and works through the manufacturing team to our dealer network.

Some **new product** pages:

- Air Dryers
- Donaldson Ultrafilter
- Camozzi
- Shamal and others

**Compressed Air Systems** and **Pneumatic Automation** is used in most industries. **Airpower**together with its Dealer Network provides Service and advice to a wide variety of customers.

Some of the Industries serviced by **Airpower** include:

- Mining both onshore and offshore
- Oil exploration
- Farming
- Manufacturing
- Maintenance
- Medical and Dental
- Transport i.e. Vehicular, Marine and Aviation
- Food processing
- Electrical Distribution
- Water Reticulation
- Municipal Services
- Building
- Many other industries







**Airpower** specializes in the fact that it is able to provide the **complete system from inception to installation**. We have all the qualifications to be able to assess the customer's requirements and to design, install and commission the system to ensure customer satisfaction.

**Airpower** plans to continue marketing the best engineered product at a reasonable price. **Airpower** will **NOT** sacrifice quality for price and will continue to introduce new products in order to keep abreast with market trends.

# **Air Dryers**

As supplied by Airpower

Airpower supplyies, installs, commissions and services refrigerant and desiccant air dryers.

Airpower designs the air dryer system to suite your factory and our local weather conditions.

It is of utmost importance that the dryer is correctly sized for your air reticulation system. If the dryer and filters are maintained correctly, you will have a trouble free pneumatic and air system.



#### **Compressed air:**

All compressors suck the same air from the atmosphere. This air has a certain percentage of moisture. The cooler the compressor runs, the more moisture will condence out in the receiver. These are the better compressors. If the compressor runs warm, less moisture is condensed in the receiver and that moisture is carried with the air to the point of use and causes pneumatic failures. Water is non compressable and in a pneumatic system, it reacts as a solid and damages the equipment.

#### Refrigerated air dryers:

To cool water down, takes much more energy, than to cool compressed air. This is why Airpower installs an automatic drain, pre- filter. This filter removes all the condensate, before the dryer and reduces the load on the dryer. The refrigerated dryer cools the air to approximately 4°C and filters the air at this temperature. The air is then heated back to room temperature and will have an under pressure dew point of 4°C.. After the dryer, Airpower installs, an additional, after filter. This is to take odours and other impurities out of the air system.

#### **Desiccant air dryers:**

Also called heatless dryers.

Desiccant are crystals, which adapt to its environment. If the environment is wet, the crystals absorb water until they get as wet as the environment, in this case, compressed air. If the environment is dry, the crystals give moisture off, until it gets to the same moisture content.

The desiccant dryer has two containers filled with desiccant crystals. The compressed air flows through one container. The crystals absorb the moisture and the air comming out of this container is dry. About 15% of this dry air, is fed back to the other container. This container is at very low pressure and is dried by the dry purging air. Once this container is dry and the other unit wet, the two containers are swopped around.

The dryness of the air, depends on the percentage purged air and the speed the air flows through the container. A dew point of -60°C, under pressure and even more can be obtained by this type of dryer.

This dryer also needs a pre and after filter to remove condensate as well as any oil in the air. Oil damages the crystals.

#### Filters:

Many times called water traps.

When compressed air flows through a filter, the filter catches about 98 % of the droplets in the air. The air coming out of the filter, is still saturated at that temperature and pressure. If you regulate the pressure to a lower pressure, the air is dry at that lower pressure and same temperature.

## **Donaldson Ultrafilter**

As supplied by Airpower

Filter with Econometer/ Economizer and pneumatic/ electronic drain resp. plug for application of different element types for the industrial processing of compressed air and gases.



#### **Donaldson Ultrafilter**

Product description: The filters Ultra-Filter DF are intended for the processing of compressed air or other gases in different areas of applications.

The intelligent overall concept of the filter unites the following characteristics:

high performance effiency compactness easy of use flexibility safety

Validated performance data acc. to ISO 12500-1 for reliable achievement of compressed air quality suitable to the application acc. to ISO 8573-1.

Besides energy cost savings by the filter design, the use of the Economizer offers further saving achievements through timely replacement of the used filter elements. The most costeffective replacement time for the filter element is calculated and LEDs then signal that the "filter exchange" is neccessary.

With 9 sizes the Ultra-Filter covers the performance range from 35 to  $1100 \, \text{m}^3\text{/h}$  flow rate and hence conventional compressor capacities between 2 and 120 KW.



## Three versions are available:



#### **Standard**

(type with float condensate drain and Econometer / with element A with plug, without Econometer).

#### Plus

(float condensate drain and Economizer / with element A with plug and Economizer).

## Superplus

(level-controlled condensate drain UFM-T and Economizer).

A selection of appropriate filter grades by filter element types S, M, V, B, P, A ensure that the right product for the filtration task is always available to the user.

The filter housing design allows an easy replacement of the filter element. The filter bowl is rotated slightly via a bayonet lock and can be removed together with the filter element. For this a installation height of only a few centimetres of ground clearence is neccessary.

Features:	Benefits:	Options:	
Validated performance data acc. to ISO 12500-1	Reliable achievement of compressed air quality acc. to ISO 8573-1	Econometer	Mechanical differential pressure indicator
Intelligent overall concept	Flow range, filtration grades, effiencies and available options perfectly meet requirements of industrial air purification	Economizer	Differential pressure indicator for the determination of the most economical time for replacement of the filter element; Possibility of remote data transmission
Flow-optimised filter housing and filter element design	Low pressure losses, thereby saving of energy costs	KA ½ / UFM- P	Float drain, pneumatically
Bayonet fixing between filter head and filter bowl; element can be removed together with filter bowl; filter head with integrated differential pressure indicator can be rotated	Easy to use construction - simplified filter replacement; simple installation and assembly	UFM-T	Electronic level-controlled condensate drain without compressed air losses

Little installation height for the filter element exchange, differential pressure indicator integrated in filter head	Compact, space-saving construction - installation within smallest space possible	UFZ	Time-controlled condensate drain
Changing the coding clip inside the filter cover allows the filter element to be rotated and thus change the flow direction	High flexibility - filters can be either used as coalescense filters or particulate filters	S	Plug
Filter cannot be opened under pressure due to bayonet lock	High safety during operation	Wall bracket	Distance to the wall gradelessly adjustable (except DF-0035)
Filter housings immersion-laquererd on the inside and outside surface	Ensures long-term corrosion protection, in particulary against aggressive condensates	Connection adapter	Intelligent adapter solution for filter combination

## **Electric Driven Compressors (Complete)**



**Direct Drive:** The FINI FLASH is a 12V direct drive compressor which is very popular amongst the 4X4 fraternity. Suitable for inflating tyres from 0-200KPa in just on 60 seconds.

The Koala direct drive mini compressor in 12/24VDC versions for inflating tyres from 0-200 kPa in 120 seconds. **Belt Driven:** Single Phase Range from 1.1kW to 2.2kW electric motors and up to 150 litres reservoir capacity at 8-10 bar. **3 PHASE:** Range from 2.2kW to 15kW electric motors. Reservoir capacities from 100 to 500 litres. All AP 3 Phase units, up and including 7.5 kW are supplied with Direct Online Starters included in the price. Larger units (11 and 15kW) are supplied with Star/Delta starters included in the price (Connection excluded). **Pruning Compressor:** These are self contained units i.e. compressor with reservoir, regulator, gauge and quick couplers. The compressor is driven by a propeller shaft connected to the Tractor PTO and is carried by the Tractor 3-Point linkage.

#### **Petrol / Diesel Driven Compressors**



**Petrol/Diesel Driven Compressors:** Compressors driven by 9HP Petrol engines or 7HP Diesel engine(Special designs) are available on request. These are used extensively in the tyre industry as well as by emergency services.

## **Screw Compressors**

**Screw Compressors:** From 7.5 HP up to 75 HP are stocked. Generally better suited where continuous air supply is required. Larger unit, up 500 kW can be imported on special request.



#### **Vacuum pumps:**

**Vacuum pumps:** Airpower build piston as well as screw type vacuum pumps to your requirements. Our main market is hospitals and dental practices.

## **Compressor Blocks**



**Compressor Blocks:** Ranging from 200l/min to 2200 l/min. They are of industrial standards and have cast iron cylinder heads for heavy duty continuous operation. Medium Duty ABAC units also available.

#### **Electric Motors**

**Electric Motors:** From 1.1kW single phase to 3kW 3 phase

#### **Air Receivers**

**Air Receivers:** Imported CE Standard and locally manufactured receivers are stocked. The local receivers are to a heavy duty standard being manufactured from 6mm plate and conform to Airpowers design parameters.

## **Air Hose and Spiral Tubing**

**Air Hose and Spiral Tubing:** Airpower is an Authorised GOODYEAR hose distributor. GOODYEAR Pliovic rubber hose in sizes from 6mm to 12 mm ID is stocked as well as GOODYEAR Odyssey Hose from 8mm to 25 mm ID. We stock Suzy coils in 6, 8, 10 and 12mm ID and up to 20 metre stretched length.

#### **PVC and Nylon Hose**

**PVC and Nylon Hose:** Clear reinforced nylon hose 6mm to 20 mm ID. Nylon tubing to DIN 73379 available from 4mm to 14mm ID.

## **Pressure Gauges**

**Pressure Gauges:** Gauges available in Plastic, steel and stainless steel. Bottom entry and Rear entry available from 1/8" to ½ "BSP. Glycerine filled gauges are available in some sizes.



## **Spray Guns**



**Spray Guns: Airpower** has a wide range of suction and gravity feed AIR GUNZA (A Division of IWATA) spray guns. These guns can be fitted with nozzle sizes ranging from 0.8 to 3.0mm, to suit almost any application. 10 litre and 24 litre pressure pots with agitators. Supplied with or without spray guns to suit most applications. 10 litre light duty pots are also available. **Air Guns:** Air blow guns, standard and long neck available. Paraffin spray guns, Standard and wide mouth. Tyre inflators available with gauge and in single or double chuck versions.

### **Air Accessories and Compressor Parts**

**Air Accessories and Compressor Parts:** Accessories for compressors i.e. Idle Running Governor, Drain Cocks, Air intake filters, Non-Return Valves and Ball Type Air cocks. A large range of compressor spares i.e. Pistons, Piston Rings, Gaskets, Seals, valves and Pressure Switches are kept in stock to service our range of compressors. **Quick Couplers and Fittings:** Quick Couplers and a variety of Quick Coupler Nipples for connection to

airlines. Large selection of fittings and adaptors for connection to air lines. Filters, **Regulators and Lubricators:** Two ranges of FRL are available, Ghiotto and Camozzi. They are available in port sizes from 1/8" to 1". Precision regulators also available. Plated Brass Fittings/Pipe Installations: Airpower is well known for their quality workmanship when it comes to Pipe installation. We have a large variety of nickel plated brass fittings i.e. nipples, reducing nipples and bushes, connectors, tee pieces and elbows available in sizes from 1/8" to 1". Pneumatic Pruning Shears: Airpower imports Kuker pruning shears. Spares and repair facilities are available for Kuker Shears. Refrigerant Dryers for Compressed Air: Airpower Stocks a range of Refrigerant Dryers from 650 l/min to 7000l/min. Totally enclosed Belt Guards: Imported Belt guards in sizes from 500x300 up to 1100x600. All Belt Guards are epoxy coated or galvanised for extra protection against corrosion. Universal Hose Clamps: Steel and Stainless Steel clamps in sizes ranging all popular sizes. Brass **Compression Fittings:** Brass Compression type fittings used in our air line installations for either Copper or Polycop Pipe. Straights, elbows and tee pieces from 15mm to 28mm. Ball valves: Plated brass ball valves as well as Stainless steel, lockable ball valves. Weldon brass fittings: Airpower keep elbows, bends, tees as well as straight fittings in 8,10,12,15 and 22 mm.

## **Compressors for Hire**



Compressors for Hire: Airpower has available for hire, electrical compressors ranging from 1.1kW to 55kW units as well as 4kW petrol units. We also have compressors available on a 60 month hire purchase scheme by special arrangement. Warranty All Airpower products are guaranteed. Our AP Compressor models carry an unlimited guarantee against faulty material and workmanship and a 12 month guarantee against normal wear and tear. Misuse and use outside of the normal operating specification will make this warranty null and void. Oil and Filters are not covered by this warranty.

Our PA range of compressors is covered for 12 Months against faulty materials and workmanship. Filters, Oil and Electrical parts are excluded from this warranty.

Our VEK Screw Compressor range is guaranteed for 3000 hours provided Airpower or an Airpower approved dealer has carried out the services as prescribed by the manufacturer.

## **Petrol / Diesel Driven Compressors**



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