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SUSTAINABLE MANUFACTURING

Industry-Leading Reliability, Unmatched Versatility

Industrial Rotary Vane Air Compressors,
for the most demanding environments



UPTO 10 YEARS
hydrovane
ADVANCE™
Leading Technology - Unbeatable Warranty
GUARANTEED

Premium compressor design
and industry leading warranty

1.1 to 22kW
Fixed & Variable Speed

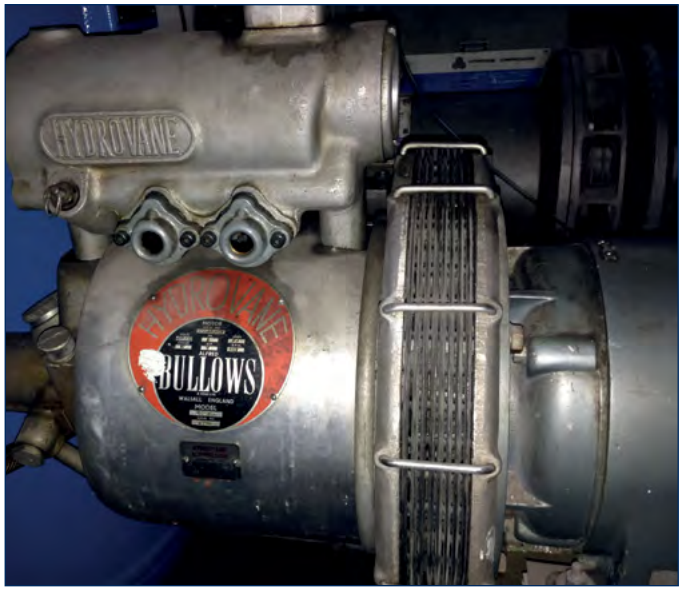
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Robust and reliable – designed to keep running and running…



Based in Redditch and "Made in Britain", Hydrovane has taken the world by storm – a global leader with over 65 years of experience in the field. First created in the 1960s, rotary vane "Hydrovane" compressors continue to be renowned for a quality that simply lasts and lasts. This has delivered a reputation for reliability and durability in the minds of those requiring consistent, high-quality compressed air.

Hydrovane compressors have been designed with customer needs in mind; even in the most demanding or heavy-duty operations, they take continual, intensive use in their stride. Over the years, their design has been continually adapted and altered to keep up-to-date with the latest developments in compressed air technology. However, this has been achieved without compromising the simplicity and versatility that give Hydrovane compressors the quality and reliability that put them far ahead of their competitors.



"A 60 year old Hydrovane compressor still in daily operation at the University of Manchester – one of approximately 70 Hydrovanes used across the site, which has been at the forefront of engineering development since it opened. The compressor was donated to a professor at the university when it opened in 1967."



> Designed with customer needs in mind; even in the most demanding or heavy-duty operations, they take continual, intensive use in their stride.

Hydrovane – **The Right Compressor For Your Industry**

Known for their industry-leading reliability and versatility, Hydrovane compressors have become a market favourite, loved for their durable design and cost-effective performance. Over three-quarters of a million Hydrovane compressors have been installed worldwide, strengthening their position as a tried and trusted compressed air technology.

Their versatility remains unmatched, with a unique design concept that utilises a standard base frame which facilitates the addition of four clip-on panels that enable the 'open' compressor to become an enclosed unit. This helps to reduce noise levels to as low as 62 dB(A) and improve the aesthetics of your system. Equally, incorporating fixed and regulated speed models into the range allows for complete flexibility when matching air demand with your business needs.

Built to Last - **Expert Rotary Vane Technology**

The Hydrovane range of air compressors utilises the innovative rotary vane principle of producing compressed air. This compressed air production method was first marketed in 1952 and is widely considered one of the most effective, simple technologies. So, how does the rotary vane principle work…

1. These technologies are powered by a rotor that has a number of slots
2. These slots fit sliding vanes that ride on a film of oil
3. The rotor rotates within a cylindrical stator
4. As the rotor is rotating, centrifugal force extends the vanes from their slots which creates individual compression cells
5. Rotation causes the cell volume to decrease, which, in turn, increases the air pressure & compresses the air



The Features are **Your Benefits**

Reliability, reliability, reliability…!

Hydrovane compressors can last over 100,000 hours – equivalent to 8 hours of operation every working day for 40 years! How is this possible? By only utilising one significant moving part to compress air, Hydrovane compressors have fewer internal elements that can break down, drastically reducing downtime and maintenance costs. In addition, due to the slow rotating speed of the vane technology, stress on the internal equipment is reduced, dramatically increasing the life of the air end. These innovative features allow Hydrovane systems to act consistently and reliably at their best.

Low Noise

The low, non-disruptive noise levels of these compressors allow them to be sited close to the point of use.
This enables them to operate seamlessly within your compressed air system without the need for complicated, costly pipework or compressor storage.

High Air Quality

Hydrovane compressors ensure good quality air due to their low operating temperatures. This, once again, is thanks to their slow rotational speed, which allows for good heat transfer. Low operating temperatures, coupled with Hydrovane's innovative, integral aftercooler, ensure the removal of water vapour. This reduces the risk of contamination and equipment damage whilst maximising air quality.

A Range of Vane Compressors – from stand-alone…

Open Style – Fixed Speed

These open fixed-speed solutions are small, compact solutions ideal for light industrial and workshop applications – for where compressed air outlets need be situated close to the point of use.

1.1 - 7kW Models

Base or Receiver mounted

- 50 Hz
- 1.1 - 7 kW
- 10 bar
- 0.12 - 1.04 m^3/min
- 4 - 37 cfm





> A rotary vane compressor for the twenty first century retaining the features which have built a reputation for quality and reliability around the world.

Enclosed – Fixed and Regulated Speed (RS)

Taking components that have been developed specifically with energy-saving in mind, Hydrovane's designers and engineers have developed a rotary vane compressor for the twenty first century, whilst retaining the features which have helped build Hydrovane's reputation for quality and reliability around the world.

Whilst all Hydrovane rotary vane compressors are designed and built with the highest levels of efficiency in mind, if you're looking for the ultimate in energy saving technology, we offer our 7 to 22 kW machines with a Regulated Speed (RS) option. RS machines optimise energy efficiency when operated below full load capacity. This can deliver benefits of up to 50% energy savings compared to the equivalent standard fixed speed model.

4 - 22kW Models

Fully Enclosed

- 50 Hz
- 4 - 22 kW
- 7 - 10 bar
- 0.5 - 3.5 m^3/min
- 20 - 125 cfm





…to the Complete Compressed Air Solutions

Hydrovane compressors are also available as integrated packages, promoting a more cost-effective system. These solutions include Hydrovane's Hypac systems fully equipped with integrated membrane or refrigerant dryers and receiver and filtration options.

Expert Hydrovane Authorised Distributors can advise you on the best solution for your exact industry and application needs. Our innovative package solutions can then be delivered to you as a factory-built package or supplied as a kit for local assembly.

Hypac 4 - 22kW ERD - Fixed & Regulated Speed (RS) & 5 Series SE ATK 1.1 - 4kW

Integrated Rotary Vane with Receiver, Dryer & Filters

You can save even further with our most comprehensive offering for optimum convenience. This solution is fully packaged with integrated receivers, refrigerant dryers and filtration, offering the best solution for your compressed air needs.

- Complete Package
- Integrated Refrigerant Dryer or Membrane Dryer
- Integrated Receiver
- Filter Pack
- 50 Hz
- 1.1 - 22 kW
- 6 - 10 bar
- 0.14 - 3.5 m^3/min
- 4 - 125 cfm



Hydrovane Pro Electronic Controller – at the heart of your compressor's performance



Hydrovane Pro puts you in complete control of your compressed air system with innovative features such as:

- Timer Control
- Second Pressure Setting
- Status Display
- Real-Time Clock
- Error Logs
- Digital Inputs
- Group Faults Outputs
- MODBUS RTU
- Flash Programmable
- Sequencer Capability

All Hydrovane compressors, both Fixed and Regulated Speed in the 4 to 22 kW model range, are fitted with the Hydrovane Pro Electronic Controller as a company standard. With simple-to-use, efficient electronics, our intelligent control system helps protect your investment with unmatched operational monitoring.

iConn inside

iConn utilises the technological benefits of IIoT and I4.0 to provide smart, proactive real-time monitoring that delivers in-depth knowledge of your compressor's operational health and performance. This enables total peace-of-mind protection and accurate production planning by generating comprehensive statistics and insights. iConn detects potential issues before they become a problem by promoting fast response times that minimise machine downtime. Our HV11-22 model range are equipped with our iConn Industry 4.0 solution as a **standard**.

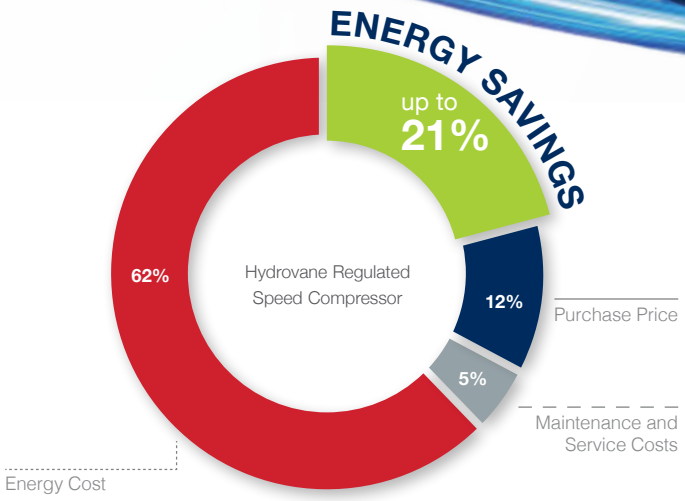


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Lower Your Costs
With Hydrovane



Hydrovane compressors take the stress out of compressed air production by keeping its design simple rather than overcomplicating it. With this trusted, long-lasted technology, you can experience up to 50% energy savings. In addition, regulated speed models can reliably and efficiently cope with varying air demand. By only using the energy it needs to create the compressed air it needs, a regulated speed Hydrovane compressor enables a reduced cost of ownership due to lowered energy costs.



How Can Regulated Speed (RS) Technology Help You Save Energy & Reduce Maintenance Costs?

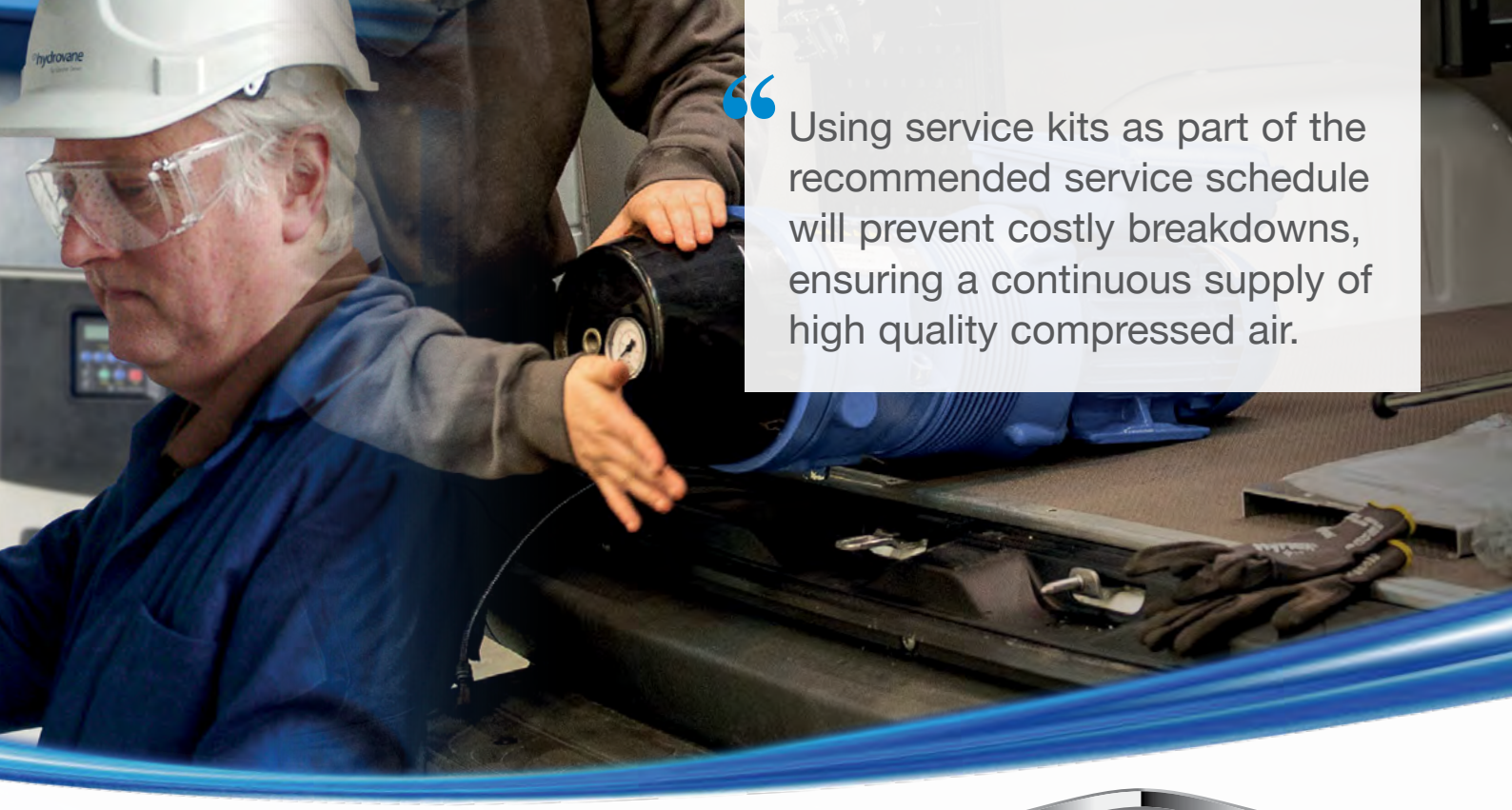
The reduction of energy wastage and ultimately energy costs is an increasing priority for every business within every market sector on a global basis. To help achieve this objective, Hydrovane offers a comprehensive range of Regulated Speed compressors.

Compressed Air Treatment

Compressed air treatment solutions designed and manufactured by Hydrovane, protect your systems and processes and deliver an energy-efficient, cost-effective and environmentally-friendly solution.

Unwanted substances can and do occur in compressed air – from the ambient air inducted and generated by the process, e.g. dirt, dust, water, oil, and other micro-contaminants. By installing the correct air treatment system for your application, moisture and contaminants that will damage your production and application efficiency and increase costs will be avoided altogether.





> Using service kits as part of the recommended service schedule will prevent costly breakdowns, ensuring a continuous supply of high quality compressed air.

Protection Guaranteed With Our…

ADVANCE 10 Year Warranty – Delivering Total Peace of Mind

Our ADVANCE 10 warranty ensures up to 44,000 operating hours, up to 6 years on the compressor, and 10 years on the specially developed airend. With the warranty extension being free of charge, you can rest assured and enjoy total peace of mind. We've got you covered![1)]

The Benefits:

- It's **INCLUDED!**
- Guaranteed Quality
- Accurate Maintenance Budgeting
- Maximises Compressor Life
- Appropriate Service Schedule
- Trained & Qualified Engineers

[1)] 10 years/44,000 hours on the air end.
Whichever is the soonest. Subject to Terms & Conditions.

Sales & Aftermarket Support You can Trust!

Regular maintenance is the key to long, reliable, trouble-free compressor life. Our network of Authorised Distributors and highly skilled, factory-trained service engineers are available around the clock to supply and maintain Hydrovane's range.

- **FREE** Energy Surveys
- Service Kits – Genuine OEM Spare Parts
- Lubricants – Approved for Vane Usage
- Factory-Trained Service Engineers

Look after your Hydrovane and it will last a lifetime.



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Technical Data

HV01 - HV04

Model	Motor Power [kW]	Voltage/ Phase [50Hz]	Starter Type	Configuration	Receiver Capacity [litres]	Maximum FAD m³/min [cfm] [10 bar]	Dimensions [mm] Length	Width	Height	Noise [dB(A)]	Air Quality [mg/m³]
HV01	1.1	240V 1Ph 400V 3Ph	DOL	Base Mounted	N/A	0.12 (4.3)	673	313	366	62	<3
HV02	2.2	240V 1Ph 400V 3Ph				0.23 (8.0)				69	
HV01	1.1	240V 1Ph 400V 3Ph		Receiver Mounted	100	0.12 (4.3)	966	386	784	62	
HV02	2.2	240V 1Ph 400V 3Ph				0.23 (8.0)				69	
HV04	4	400v 3Ph			200	0.57 (20.1)	1390	462	998	73	

HR05PR - HR07PR

Model	Motor Power [kW]	Voltage/ Phase [50Hz]	Starter Type	Configuration	Receiver Capacity [litres]	Maximum FAD m³/min [cfm] [10 bar]	Dimensions [mm] Length	Width	Height	Noise [dB(A)]	Air Quality [mg/m³]
HR05PR	5.5	400v 3Ph	SD	Receiver Mounted	200	0.77 (27.02)	760	1332	1068	73	<3
HR07PR	7.5					1.04 (37.0)				73	

HR04E - HR07E - Fixed Speed

Model	Motor Power [kW]	Voltage/ Phase [50Hz]	Starter Type	Maximum FAD m³/min [cfm] [7 bar]	[10 bar]	Dimensions [mm] Length	Width	Height	Noise [dB(A)]	Air Quality [mg/m³]
HR04E	4	400V 3Ph	SD	0.68 (24.0)	0.57 (20.1)	680	630	1055	66	<3
HR05E	5.5	400V 3Ph		0.91 (32.1)	0.71 (25.1)					
HR07E	7.5	400V 3Ph		1.25 (44.1)	1.00 (35.0)				67	

HR07E RS - Regulated Speed

Model	Motor Power [kW]	Voltage/ Phase [50Hz]	Starter Type	Maximum FAD m³/min [cfm] [8 bar]	[10 bar]	Dimensions [mm] Length	Width	Height	Noise [dB(A)]	Air Quality [mg/m³]
HR07E RS	7.5	400V 3Ph	SD	1.06 (37.4)	0.97 (34.3)	680	630	1055	70	<3



HV11 - HV22 - Enclosed Fixed Speed

Model	Motor Power [kW]	Voltage/ Phase [50Hz]	Starter Type	Maximum FAD m³/min [cfm] [8 bar]	[10 bar]	Dimensions [mm] Length	Width	Height	Noise [dB(A)]	Air Quality [mg/m³]
HV11	11	400V 3Ph	SD	1.62 (57.6)	1.41 (49.8)	850	700	1550	69	<3
HV15	15			2.21 (78.1)	2.01 (71.0)				70	
HV18	18			2.94 (104)	2.55 (90.0)					
HV22	22			3.60 (127.0)	3.12 (110)				71	

HV11 - HV22 - Enclosed Regulated Speed

Model	Motor Power [kW]	Voltage/ Phase [50Hz]	Starter Type	Maximum FAD m³/min [cfm] [6 bar]	[8 bar]	[10 bar]	Dimensions [mm] Length	Width	Height	Noise [dB(A)]	Air Quality [mg/m³]
HV11RS	11	400V 3Ph	SD	1.74 (61.4)	1.56 (55.1)	1.37 (48.4)	850	700	1550	69	<3
HV15RS	15			2.29 (80.9)	2.03 (71.7)	1.72 (60.7)				70	
HV18RS	18			2.96 (104.5)	2.75 (96.8)	2.51 (88.6)					
HV22RS	22			3.53 (124.5)	3.22 (113.7)	3.07 (108.4)				71	

Air Solution 50 Hz

Model	Motor Power [kW]	Voltage/ Phase [50Hz]	Starter Type	Configuration	Receiver Capacity [litres]	Dimensions [mm] Length	Width	Height	Air Quality [mg/m³]	Pressure Dew Point [°C]	Ambient Temp Min - Max [°C]
HV01RM+ATK	1.1	400V 3Ph	DOL	Receiver Mounted + Membrane Dryer	100	966	421	784	0.01	30° Below Ambient	0 - 40
HV02RM+ATK	2.2								0.01		
HV04RM+ATK	4				200	1390	516	998	0.01		
HR04AERD	4		SD	Integrated Refrigerant Dryer & Receiver	260	968	1146	1165	0.1	3	
HR05AERD	5.5										
HR07AERD / HR07AERD-RS	7.5										
HV11AERD / HV11AERD-RS	11				272	1187	1355	1550			
HV15AERD / HV15AERD-RS	15										
HV18AERD / HV18AERD-RS	18										
HV22AERD / HV22AERD-RS	22										

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Unmatched Reliability & Durability



Innovative Vane Technology Designed to Keep Running and Running and Running - However Tough the Environment!

Rotary Vane Compressors for the twenty first century retaining the features which have around the world.

Hydrovane compressors can last over 100,000 hours - equivalent to 8 hours of operation every working day for 40 years! How is this possible? By only utilising one significant moving part to compress air, Hydrovane compressors have fewer internal elements that can break down, drastically reducing downtime and maintenance costs. In addition, due to the slow rotating speed of the vane technology, stress on the internal equipment is reduced, dramatically increasing the life of the air end. These innovative features allow Hydrovane systems to act consistently and reliably at their best- day after day after day!

Reliable, versatile, powerful and cost effective.

Constant improvements in technology deliver features which make Hydrovane a great product, admired by thousands of owners worldwide. Designed with our customer needs in mind; even in the most demanding or heavy duty operations, they take continual, intensive use in their stride with fixed and regulated speed models into the range allows for complete flexibility when matching air demand with your business needs.

www.hydrovaneproducts.com

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