Rotary vane air compressors for industry

## <sup>©</sup>hydrovane

## Industry's advantage with Hydrovane



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www.hydrovaneproducts.com

# hydrovane

#### **Rotary Vane Air Compressors**

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# The right compressor for your business

## Versatile

## Open and enclosed format packages and air end options

- 50 / 60 Hz
- 6 10 bar
- 0.1 7.5 m<sup>3</sup>/min
- 4 264 cfm

#### Quiet as standard

With noise levels as low as 62 dB(A) a Hydrovane can be located at the point of use.

#### Fixed and Regulated speed models

Matching air demand with your business needs.

## Reliable by Design

#### **Direct drive**

No gears. No belts. Up to 100,000+ operating hours due to its simple integral design.

#### High quality air

Clean, dry and pulse free straight from the outlet means less downstream equipment required.

#### Slow speed

1450 - 1760 rpm speed operation results in low noise, low stresses and long life.

#### **Common replacement parts**

Quick, cost-effective servicing, with minimal downtime.

### Powerful and Cost Effective

#### Hydrovane Pro Controller

For total electronic control, greater connectivity and flexibility.

#### **Regulated speed**

Proven, simple and long-lasting technology solutions delivering up to 50% energy savings.

## Reduced Energy Venting System (REVS)

Reducing off-load power to as low as 20%.

#### Air Intake modulation control

No wasteful overproduction of air.

## Guaranteed

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#### Market leading warranty

Up to 10 years or 48,000 operating hours is now available for total peace of mind on all standard Hydrovane models.

#### **Distributor support**

Hydrovane machines are supplied and maintained by a wide network of Authorised Distributors and highly skilled, factory-trained service engineers.

## A range of compressors

## From stand-alone...

#### Open - Fixed Speed

Small and compact, Hydrovane HV01 - HV04 models are ideally suited for light industrial and workshop applications where the compressed air outlet needs to be situated close to the point of use.

#### Enclosed – Fixed Speed 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.

#### HV01 - HV04 Models

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#### Tripod or Receiver mounted

- 50 / 60 Hz
- 1.1 4 kW
- 10 bar
- 0.1 0.6 m<sup>3</sup>/min
- 4 20 cfm

#### HR04 - HR07RS Models

• 50 / 60 Hz

Fully Enclosed

- 4 7.5 kW
- 7 10 bar

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- 0.6 1.3 m<sup>3</sup>/min
- 20 46 cfm







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 energysaving technology, we offer our 7.5 to 45 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.

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#### HV11 - HV45RS Models

#### Fully Enclosed

- 50 / 60 Hz
- 11 45 kW
- 6 10 bar
- 1.3 7.5 m<sup>3</sup>/min
- 46 264 cfm



## ...to the complete compressed air solution

## Complete packages save space. Save time.

Hydrovane compressors are available as fully integrated packages. Hypacs are available with membrane or refrigerant dryers and integrated receivers and come as a factory built package or can be supplied as a kit for local assembly.

#### Integrated packages can be more cost- effective than building a system using separate components.

Hydrovane's knowledgeable Authorised Distributors can advise you on the best package for your business to make the most of factory space and give you more for your budget.

#### Hypac Open - Fixed Speed

#### Hypac Enclosed – Fixed Speed and Regulated Speed (RS)

#### HV01 - HV04 Models

#### HR04 – HV22RS Models

Receiver Mounted	Fully Enclosed
<ul> <li>Integrated Membrane Dryer</li> </ul>	<ul> <li>Integrated Refrigerant Dryer model</li> </ul>
• 50 / 60 Hz	<ul> <li>Integrated Receiver model</li> </ul>
• 4 - 7.5 kW	• 50 Hz
• 10 bar	• 4 - 22 kW
• 0.1 - 0.6 m³/min	• 7 - 10 bar
• 4 - 20 cfm	• 0.6 - 3.6 m³/min
	• 20 - 127 cfm
	Thydrovers
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## Make your budget go further

#### Hydrovane Air Solution packages are the ultimate in convenience.

Fully packaged with integrated receivers, refrigerant dryers and filtration, Hydrovane Air Solution models offer you the best solution for your compressed air requirements.

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#### Air Solution Enclosed – Fixed Speed and Regulated Speed (RS)

#### HR04 - HV22RS Models

Fully Enclosed. Fully Packaged

- Complete Package
- Integrated Refrigerant Dryer

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- Integrated Receiver
- Filter Pack
- 50 Hz
- 4 22 kW
- 6 10 bar
- 0.6 3.6 m<sup>3</sup>/min
- 20 127 cfm



At the heart of your compressor's performance

## Hydrovane Pro puts you in complete control

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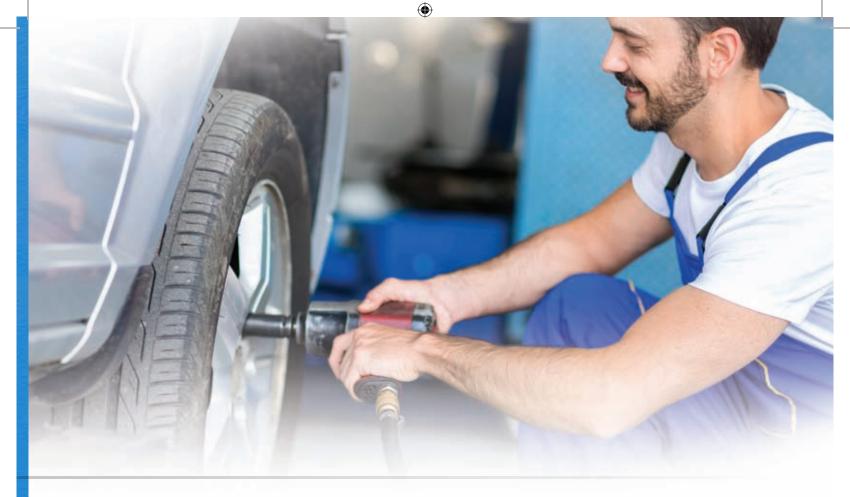


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#### HR04 - HV45RS Models

Hydrovane Pro Controller Features:

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



## with simple-to-use, intelligent electronics

All Hydrovane compressors in both Fixed and Regulated Speed in the 4 to 45 kW model range are fitted as standard with the Hydrovane Pro Electronic Controller. This control system ensures reliable operation and protects your investment by continuously monitoring the operational parameters of the compressor.

The Hydrovane Pro also has the capability to have programmable inputs and outputs for increased control of ancillary equipment.

It is now possible to simply connect a Hydrovane Pro controlled compressor to the range of Sequencer Technologies within the Gardner Denver group allowing flexibility of use and maximising energy reduction.

#### HV01, HV02 and HV04 Models Standard Starters

A high quality srarter with a robust control circuit, including over-temperature protection.



## SAVE ENERGY

## Reduce your energy costs

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## How does a Hydrovane compressor save energy?

#### Regulated Speed (RS)

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• RS control ensures optimum load conditions throughout the compressor's speed range **Delivering maximum efficiency** 

#### Air Intake Modulation

 Air intake modulation at minimum speed deliveries further energy savings
 To match the reducing air demand

#### Reduced Energy Venting System (REVS)

• In-built Reduced Energy Venting System (REVS) Improved part-load and off-load performance

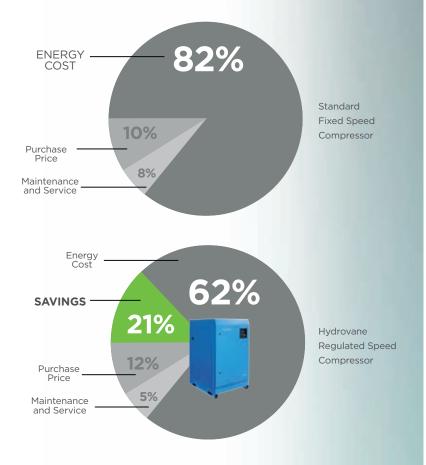
#### SMART SERVO energy reduction system

Optimised motor, drive and air end
 Proven air cooled inverter drive
 High efficiency across a broad flow range
 Substantial energy savings delivered.

Please contact your local authorised Hydrovane distributor for an Air System Energy Review and Data Logging.

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### Reduce the cost of ownership and minimise your energy consumption.



## Customise your Hydrovane

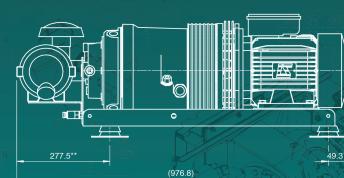
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## to suit your applications

With Hydrovane's versatile rotary vane compressor technology, we can deliver the widest range of bespoke OEM solutions.

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The possibilities are endless when it comes to supplying air for a specific application inside and outside the standard industrial arena. Hydrovane has over 50 years experience in supplying proven solutions to OEMs, either as air ends or complete packages, designed and purpose built. In addition, there are occasions when a customer may require a special build, and this is where Hydrovane can deliver custom solutions.





r Cooled Compressor Arrangement

or Part Numbers refer to Drawing AV04-ATSN-xx

Performance @ 1450 rpm: - 500° I/min @ 10 bar - 350° I/min @ 12 bar Max Working Pressure: 12 bar Ambient: 40°C max Mass: 75° kg (approximately)

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\* Compressor stator and motor type will be selected to suit specific flow/pressure requirements and ambient conditions. Motor dimensions/weight may vary.

\*\* Inlet Air Cleaner can be supplied as a loose item or mounted on a bracket on the end of the frame. Air Inlet adapter can be rotated through 30° increments to suit the application.

## Hydrovane Advance<sup>™</sup>10

#### Warranty that delivers complete peace of mind

Advance-10

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#### Hydrovane standard warranty:

All Hydrovane compressors are guaranteed for 12 months from the date of installation providing the installation is approved by an authorised Hydrovane distributor and the correct service procedures and genuine service kits, parts and lubricants are used. The Hydrovane Advance 10 extended warranty programme is a unique market leading compressor care package designed to deliver comprehensive warranty cover for up to 10 years or 48,000 operating hours on all Hydrovane compressor airends.

#### Key benefits

- 🔶 Free
- Guaranteed Quality
- Accurate Maintenance Budgeting
- Maximise Compressor Life
- Simple administration
- Hydrovane will give you an appropriate service schedule
- Trained and qualified engineers will take care of your machines.

NOTE: Terms and conditions apply to all Advance 10 Warranty offers. Please consult your local Authorised Hydrovane Distributor for details.

#### We're the professionals

Hydrovane's distributors will visit your site, free of charge, to assess your individual compressed air requirements in order to deliver the solution that best meets your requirements.

## Your local Hydrovane distributor

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#### Sales and Aftermarket Support. Back-up you can trust

Hydrovane service philosophy is one of regular maintenance being the key to long, reliable, trouble-free compressor life. Hydrovane offers extensive aftermarket support through an extensive network of Authorised Distributors who will provide:



#### **FREE energy surveys**

To test your compressed air system for possible leaks and other costly inefficiencies

#### Service Kits - Genuine OEM spare parts

The service kit concept has been developed to make our compressor servicing quick, easy and cost effective. Using the service kits as part of the recommended service schedule will prevent costly breakdowns, ensuring a continuous supply of high quality compressed air.

#### Lubricants - Approved for vane usage

Even the most reliable compressors in the world require routine lubricant changes to maintain peak performance. Over many years, Hydrovane has developed a range of high quality lubricants that have been specifically formulated to guarantee optimum compressor performance.

#### **Factory-trained service engineers**

Hydrovane is committed to providing every Hydrovane compressor owner with fully trained Service Engineers to care for their investment throughout our Global Distribution Network.

Look after your Hydrovane and it will last a lifetime

## 50 / 60 Hz Rotary Vane Air Compressors

#### Open - Fixed Speed







Motor Power	Model	Voltage/Phase		Starter	Configuration	Receiver Capacity	m <sup>3</sup> /min (cfm)	Dime	ensions (	mm)	Noise	Air Quality
(kW)		50Hz	60Hz	Туре		(litres)	10 bar	Depth	Width	Height	dB(A)	(mg/m³)
1.1	HV01	240V 1Ph 400V 3Ph	-				0.12 (4.3)				62	
1.5	HV01	-	230V 1ph 230V 3ph 460V 3ph		Tripod Mounted	-	0.14 (4.9)	270	700	470	65	<3
2.2	HV02	240V 1Ph 400V 3Ph	-				0.23 (8.0)				69	
1.1	HV01	240V 1Ph 400V 3Ph	-	DOL	Receiver	75	0.12 (4.3)	300	1120	730	62	
1.5	HV01	-	230V 1ph 230V 3ph 460V 3ph				0.14 (4.9)				65	
2.2	HV02	240V 1Ph 400V 3Ph	-		Mounted		0.23 (8.0)				69	
4.0	HV04RM	400V 3Ph	-			200	0.57 (20.1)	455	1410	990	73	
5.5	HR05PR	400V			Receiver Mounted		0.71 (25.1)	570	1770	1068		-7
7.5	HR07PR	3Ph	-	SD			1.00 (35.0)	570	1332		73	<3

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Regeneration 50 Hz Enclosed - Fixed and Regulated Speed

Motor		Voltage/Phase	Starter Type	Maximum	Dim	nensions (	mm)	Noise	Air	
Power (kW)	Model			7 bar	10 bar	Depth	Width	Height	dB(A)	Quality (mg/m³)
4.0	HR04E			0.68 (24.0)	0.57 (20.1)	695			66	<3
5.5	HR05E	400V 3Ph	SD	0.91 (32.1)	0.71 (25.1)		630	1078		
7.5	HR07E			1.25 (44.1)	1.00 (35.0)				67	
7.5	HR07E RS	400V 3Ph	V	-	0.97 (34.3)	695	630	1078	70	<3

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#### Enclosed - Fixed Speed



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Motor		50Hz		60Hz			Maximum FAD	m³/min (cfm)		Dimensions (mm)				Air
Power	Model	Voltage/	Starter	Voltage/	Starter	50	Hz	60Hz		Dopth	Width	Height	Noise	Quality
(kW)		Phase	Туре	Phase	Туре	8 bar	10 bar	8 bar	10 bar	Depth	width	Height		(mg/m³)
11.0	HV11					1.63 (57.6)	1.41 (49.8)	1.48 (52.4)	1.29 (45.6)				69	
15.0	HV15					2.21 (78.1)	2.01 (71.0)	1.90 (67.1)	1.65 (58.4)	850	700	1550	70	
18.0	HV18			460V 3Ph 575V 3Ph	DOL	2.88 (101.7)	2.55 (90.1)	2.80 (99.0)	2.44 (86.2)	850			70	
22.0	HV22	400V 3Ph	SD			3.60 (127.1)	2.96 (104.5)	3.25 (114.6)	2.83 (100.0)				71	<3
30.0	HV30					5.00 (176.6)	4.31 (152.2)	4.43 (156.5)	3.86 (136.2)				73	
37.0	HV37					5.95 (210.1)	5.07 (179.0)	5.48 (193.7)	4.77 (168.5)	1130	900	1640		
45.0	HV45					7.33 (258.9)	6.54 (231.0)	6.54 (231.0)	5.73 (202.3)					

Note: The 50 Hz / 400 Volts / 3 Phase Regulated Speed (RS) models also cover 60 Hz / 460 Volts / 3 Phase

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#### Enclosed - Regulated Speed (RS)



Motor Power	Model	Voltage/Phase		Starter	Maximum FAD m³/min (cfm)				ensions (	mm)	Noise dB(A)	Air Quality
(kW)		50Hz	60Hz	Туре	6 bar	8 bar	10 bar	Depth	Width	Height	dB(A)	(mg/m <sup>3</sup> )
11.0	HV11RS				1.74 (61.6)	1.56 (55.0)	1.37 (48.5)				69	
15.0	HV15RS				2.29(80.8)	2.03 (71.6)	1.72 (60.7)	050	700	1550	70	
18.0	HV18RS				2.96 (104.6)	2.75 (96.9)	2.51 (88.5)	850			70	
22.0	HV22RS	400V 3Ph	460V 3Ph	V	3.53 (124.5)	3.22 (113.8)	3.07 (108.3)				71	<3
30.0	HV30RS				5.38 (189.9)	4.87 (171.9)	4.51 (159.3)					
37.0	HV37RS				6.17 (217.8)	5.72 (202.1)	5.27 (186.1)	1130	900	1640	73	
45.0	HV45RS				7.47 (263.7)	6.90 (243.5)	6.51 (230.0)					

#### Hypac 50 Hz Enclosed



								Package Dimensions (mm)				
Pov	otor wer W)	Mode	1	Configuration	Voltage/ Phase	Starter Type	Receiver Capacity (litres)	Depth	Width	Height	Pressure Dew Point (°C)	Air Quality (mg/m³)
4.	.0	HR04	HRER									
5.	.5	HR05	HRER	Integrated Receiver			260	695	1220	1692		<3
7.	.5	HR07 / HR07RS	HRER / RS			SD / V						
1	11	HV11 / HV11RS			400V 3Ph		272	1187	1355	1550	8	
1	5	HV15 / HV15RS	HVER / RS									<2
1:	8	HV18 / HV18RS	HVER/R5				212					~2
2	22	HV22 / HV22RS										
4.	.0	HR04						984	630	1078		
5.	.5	HR05	HRED									
7.	.5	HR07 / HR07RS	HRED / RS									
1	11	HV11 / HV11RS		Integrated Refrigerant Dryer	400V 3Ph	SD / V	-				3	<1
1	5	HV15 / HV15RS		Diyei				825	1215	1550		
1:	8	HV18 / HV18RS	HVED / RS					825				
2	22	HV22 / HV22RS										



Motor Power (kW)	Model
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Air Solution 50 Hz - The Complete Package
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	Motor	Model			Voltage/ Phase		Receiver	Package	Dimensio	ons (mm)	Pressure	Air
6	Power (kW)			Configuration		Starter Type	Capacity (litres)	Depth	Width	Height	Dew Point (°C)	Quality (mg/m³)
	1.1	HV01RM			240V		75	300	1120	730		
	2.2	HV02RM	AERD	Receiver Mounted + Membrane Dryer	1ph or 400V 3Ph	DOL	75	300	1120		30*	<1
	4.0	HV04RM					200	455	1410	990		
	4.0	HR04	1500			SD / V						
	5.5	HR05	AERD				260	984	1220	1692	3	<1
	7.5	HR07 / HR07RS										
	11	HV11 / HV11RS		Integrated Refrigerant Dryer & Receiver	400V 3Ph		272	1187			3	<1
	15	HV15 / HV15RS	AERD / RS						1755	1550		
	18	HV18 / HV18RS							1355	1550		
	22	HV22 / HV22RS										

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Starter Types: DOL Direct On Line

SD Star Delta V Regulated Speed (RS)

Free Air Delivered (FAD) according to BS ISO1217:2009-Annex B, C and E \*Both fixed speed and regulated speed compressors operate between 0°C and 45°C ambient. Hydrovane compressors are designed for indoor installation under cover only. Contact your Hydrovane Distributor for applications outside these conditions.

## <sup>®</sup>hydrovane

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## **Global Expertise** Local solutions



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Your Ultimate Source for Pressure and Vacuum

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