



# 2 STAGE OIL-SEALED ROTARY VANE VACUUM PUMPS

Atlas Copco

GVD 0.7-28 Series (0.7-27.5 m<sup>3</sup>/hr @ 50 Hz - 0.5-19.5 cfm @ 60 Hz)



The GVD series of small oil-sealed rotary vane pumps deliver excellent ultimate vacuum pressure, high pumping speeds and superior vapor handling capabilities with quiet operation. With over 200,000 units sold, these pumps offer proven performance that sets the industry standard for R&D and scientific pumping applications. All pumps/motors are approved to UL and CSA standards by an external test house and feature our patented mode selector switch, meaning one model is suitable for both high vacuum or high throughput applications. In summary, you can rest assured that when you choose an Atlas Copco GVD 2 stage oil-sealed rotary vane pump you are choosing a product you can rely on from a company you can trust.

## FEATURES AND BENEFITS

- Ultra quiet operation and intrusive frequencies minimized.
- Easy-to-use gas ballast.
- Fast acting anti suck back system protection.
- High torque, 1-phase and 3-phase multi-voltage and 50/60 Hz motors available.
- Efficient high pressure lubrication.
- Oil-tight with printed gaskets, effective shaft seals.
- Clamped-in sight glass.
- Oil box well contains filling spills.
- Hi-tech polymer blades, large diameter, easy-clean oil passages.
- Consistent, built-in quality.
- Wide variety of accessories is available.

## APPLICATIONS

- Laboratory bench top vacuum
- Research and development
- Turbomolecular backing pumps
- Freeze drying
- Analytical instruments

# TECHNOLOGY



## Low noise levels

All our GVD pumps are significantly quieter – noise levels are typically half the noise of a conventional pump and have been achieved by extensive work on the drive train and motor.

## Exceptional pumping performance

The pumps have the ability to deliver excellent ultimate vacuum performance with or without gas ballast. This gives the user an opportunity to select the optimum pumping performance without compromising the application.



## High flexibility

The GVD pump is ideal for analytical instruments, electron microscopes, physics research, backing turbo pumps and leak detection applications. Configure the same pump and it becomes suitable for distillation, laboratory furnaces, backing vapor pumps, solvent concentration, freeze drying and other drying applications.

## Ease of use

All pumps have an IEC connector, adjustable gas ballast valve and are mounted on a baseplate to allow for easy installation.



# TECHNICAL SPECIFICATIONS GVD SERIES (50/60Hz)

Pump type	Pumping speed*		Ultimate pressure		Motor power		Overall dimensions			Noise level
			Gas ballast closed		1-ph**		D	W	H	At 50 Hz
	m <sup>3</sup> /hr	cfm	mbar	Torr	50 Hz (W)	60 Hz (W)	mm	mm	mm	dB(A)
GVD 0.7	0.75/0.95	0.4/0.5	3.0 x 10 <sup>-3</sup>	2.3 x 10 <sup>-3</sup>	90	90	151	324	178	43
GVD 1.5	1.6/2.0	0.8/1.2	3.0 x 10 <sup>-3</sup>	2.3 x 10 <sup>-3</sup>	160	160	151	324	178	54
GVD 3	3.3/3.9	2/2.3	2.0 x 10 <sup>-3</sup>	1.5 x 10 <sup>-3</sup>	450	550	170/158**	430	229	48
GVD 5	5.1/6.2	3.0/3.7	2.0 x 10 <sup>-3</sup>	1.5 x 10 <sup>-3</sup>	450	550	170/158**	430	229	48
GVD 8	8.5/10	5/5.9	2.0 x 10 <sup>-3</sup>	1.5 x 10 <sup>-3</sup>	450	550	180/158**	470/469**	265	48
GVD 12	12/14.2	7.1/8.4	2.0 x 10 <sup>-3</sup>	1.5 x 10 <sup>-3</sup>	450	550	180/158**	490/489**	265	48
GVD 18	17/20.4	10/12.1	1.0 x 10 <sup>-3</sup>	7.7 x 10 <sup>-4</sup>	550	750	183/171**	520	272	57
GVD 28***	27.5/33.0	16.2/19.5	1.0 x 10 <sup>-3</sup>	7.7 x 10 <sup>-4</sup>	750	900	183/162**	584/570**	272	57

\* Pneurop 6602.

\*\* 1-ph/3-ph (3-phase available GVD 3 to 28 inclusive).

\*\*\* 3-phase motors are energy-efficient versions.

Oil is hydrocarbon type, viscosity dependent on pump size.  
Other oil types are available on special request.

All pumps are CSA and UL approved.  
World voltages available for both 1-phase and 3-phase pumps.  
Details can be found on the datasheets.

