



# 2 STAGE OIL-SEALED ROTARY VANE VACUUM PUMPS

Atlas Copco

GVD 40-275 Series (40-275 m<sup>3</sup>/hr @ 50 Hz - 25.9-180 cfm @ 60 Hz)



The GVD series two stage oil sealed rotary vane vacuum pumps are renowned for their high ultimate vacuum, rapid pumping speeds, quiet operation and ability to handle water vapour. These direct drive rotary vane pumps are inherently compact and vibration free, and with their finger-proof fan and coupling housings they offer excellent operator protection. A comprehensive range of accessories is available to allow use on the widest variety of vacuum applications.

## FEATURES AND BENEFITS

- Advanced pressurized oil circuit to give effective lubrication even under high gas loads.
- When the pump is switched off, the spring loaded distributor valve provides oil and air suck-back protection.
- Gas ballast control to assist in handling high water vapor loads.
- Industrial roller bearings on drive shaft for ultimate reliability and long, trouble free life.
- Full height oil sight glass for easy checking of oil level and condition.
- Easy change oil filter, with oil filter condition gauge on larger models.
- Central inlet port to allow easy mounting of mechanical booster pump if required.
- Easy to maintain, with convenient service kits and international customer support.
- A wide range of accessories to match your application needs.
- The pumps and accessories can be supplied either as individual components or as fully systemized, factory-tested combinations.

## APPLICATIONS

- Refrigeration and air conditioning system evacuation, drying, and backfilling
- Vacuum drying and distillation
- Backing pump for high vacuum applications
- Vacuum metallurgy processes
- Thin film coating technologies
- Freeze drying
- Transformer and cable drying and impregnation, insulating oil treatment plant
- Cryogenic vessel evacuation

# TECHNOLOGY



## Reliable system protection devices

Every pump has protection devices to prevent oil and air suck-back into the vacuum system if the pump stops while under vacuum. A variety of inlet protection devices are used, depending on the pump size and cost, but emphasis is always placed on reliability and simplicity.

## Positive pressure oil lubrication

The GVD pumps incorporate a well proven positive pressure oil lubrication system which has been developed to ensure correct lubrication in all duty modes and particularly to prevent oil starvation with high gas loads.



## Low noise levels

The GVD pumps maintain Atlas Copco's reputation for quiet operation pumps with low noise levels.

## Easy maintenance

The advanced lubrication system allows the GVD pumps to work with wide oil level tolerances, which reduce the need to top-up the oil. All GVD pumps are constructed with internal dowels, which reduce the need for skilled setting of tolerances, when the pump is dismantled. The pumps are designed so that all key components are easily accessible.



# TECHNICAL SPECIFICATIONS GVD SERIES (50/60Hz)

Pump type	Pumping speed*		Ultimate pressure		Motor power		Overall dimensions			Noise level
			Gas ballast closed		3-ph kW		D	W	H	At 50 Hz
	m <sup>3</sup> /hr	cfm	mbar	Torr	kW	hp	mm	mm	mm	dB(A)
GVD 40	37/44	21.8/25.9	1.0 x 10 <sup>-3</sup>	7.7 x 10 <sup>-4</sup>	1.1/1.5	1.5/2	253	665	409	65
GVD 80	74/90	43.6/53	1.0 x 10 <sup>-3</sup>	7.7 x 10 <sup>-4</sup>	2.2/3	3/4	274	796	445	70
GVD 175**	160/196	94/115	1.0 x 10 <sup>-3</sup>	7.7 x 10 <sup>-4</sup>	5.5/6.5	7.5/8.5	410	994	563	75
GVD 275**	255/306	150/180	1.0 x 10 <sup>-3</sup>	7.7 x 10 <sup>-4</sup>	7.5/8.5	10/11	415	1088	565	75

\* Pneurop 6602.

\*\* Water-cooled machines.

Oil is hydrocarbon type. Other oil types are available on special request.

All motors are 3-phase energy-efficient.

IEC EN60034.

Available motor voltages:

- 400 V 50 Hz
- 460 V 60 Hz NEMA premium
- 200/380 V 50/60 Hz

