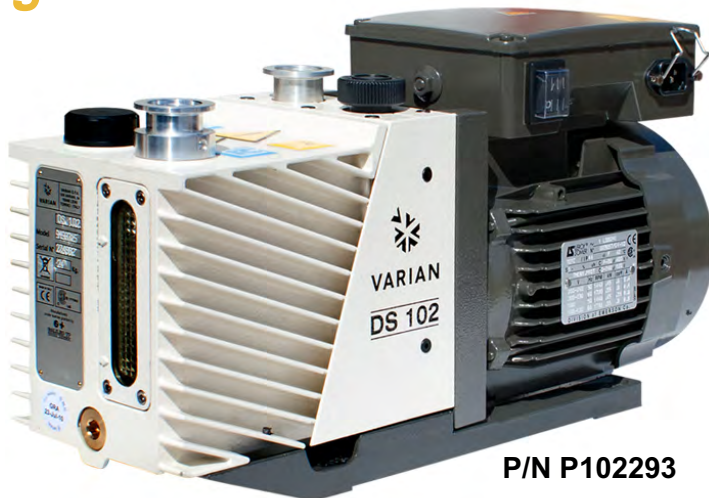


# New DS 102

## Rotary Vane Vacuum Pump

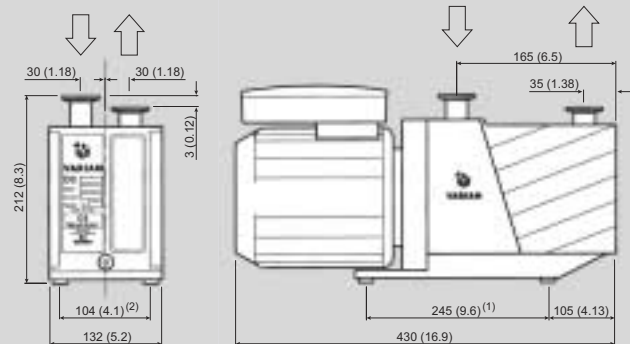
Agilent Varian

3.5 CFM



P/N P102293

### Outline Drawing



Alternative mounting holes are also available, with (1)=226 (8.9) and (2) = 98 (3.8), with hole  $\varnothing=7$  (0.3)

Dimensions: millimeters (inches)

### Technical Specifications

Free air displacement	60 Hz: 114 l/min (4 cfm)	50 Hz: 95 l/min (5.7 m <sup>3</sup> /h)
Pumping speed	60 Hz: 3.5 cfm	50 Hz: 5 m <sup>3</sup> /h
Ultimate partial pressure	10 <sup>-4</sup> mbar	
Ultimate total pressure	2 x 10 <sup>-3</sup> mbar	
Ultimate total pressure with gas ballast	2 x 10 <sup>-2</sup> mbar	
Water vapor tolerance	15 mbar	
Water vapor capacity	60 g/h	
Oil capacity min/max	0.2/0.5l	
Motor rating 1ph	60 Hz: 0.55 kW	50 Hz: 0.45 kW
Nominal rotation speed	60 Hz: 1800 rpm	50 Hz: 1500 rpm
Weight kg (lbs)	22 (48)	
Inlet flange	25KF DN	
Exhaust flange	25KF DN	

### Accessory Ordering Information

#### All Items Sold On Ideal Vacuum Website

DS 102 replacement MOTOR  
1 phase 115/220VAC, P/N P103731

Minor Maintenance Rebuild Kit, Contains all valves, o-rings and seals to refurbish the pump to vacuum integrity, P/N P102420

Major Maintenance Rebuild Kit, includes all the items of the minor kit plus the vanes, P/N P102523

To Find Pricing on our website, just copy the P/N "P-----" and paste it to our search engine on the website at [www.idealvac.com](http://www.idealvac.com)



### Applications

- Analytical Instruments
- Mass Spectrometry
- Electron Microscopes
- Leak Detection
- Industrial Vacuum Processes
- High Energy Physics
- Research Laboratories

(See other side of this Flyer for Features & Benefits)

Ideal Vacuum Products, LLC

Phone: (505) 872-0037

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# Agilent/Varian Rotary Vane Pumps Features and Benefits

## A Reliable Line of Pumps to Cover the Most Demanding Industrial and Scientific Applications

Varian Vacuum Technologies' new DS line of Rotary Vane Pumps are designed and manufactured to meet the demanding requirements of various industrial and scientific applications.

Thanks to a very simple and highly reliable design, these field proven rotary vane pumps provide excellent vacuum performance. Varian's quality and manufacturing standards ensure that the DS Rotary Vane Pumps provide high pumping stability for light gases, low noise, minimal oil backstreaming, and a long operating life.

Varian's DS Rotary Vane Pumps conform with CE requirements, and all pump motors are UL and CSA approved. Varian's world class technical support organization makes the DS Rotary Vane Pump cost-effective and well suited for a wide range of applications.



### Dual Stage Pump

The two stage design allows low  $10^{-3}$  mbar operation, low operating temperature, minimal backstreaming at low pressure, good pumping efficiency and gas ballast in the high  $10^3$  mbar region.

### Gas Ballast Valve

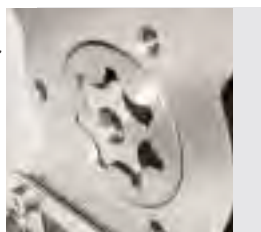
The opening of this valve injects air into the second stage of the pump. This action increases the temperature of the module which facilitates the outgassing and clean up of water vapor or other condensibles from the pump fluid.

### Socket Type IEC320

permits use of standard power cables, eliminating the need to open box and wire the motor.

### Forced Oil Circulation

The dedicated oil circulation gear pump ensures efficient and reliable lubrication of the pump from atmospheric pressure throughout the entire vacuum operating range.

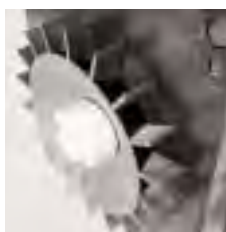


### Built-in Oil Shield

This feature minimizes the oil mist at the pump exhaust. Apart from drastically reducing the oil consumption over long periods of operation, this results in a reduction of air pollution limiting the impact on the environment.

### World-wide Motors

Pump motors, available as 1-phase or 3-phase, are suitable for all voltages and frequencies world-wide. Operational voltages are easily selectable, allowing greater flexibility, easy planning and inventory reduction.



### Forced Air Ventilation

The cooling fan between the motor and the pump reduces the pump operating temperature, lowers the oil vapor partial pressure, minimizes oil backstreaming and vacuum system contamination.

## Accessories (All Sold on Ideal Vacuum Products Website)



KF25  
Half Nipple  
P/N P101218



KF25  
Toggle Clamp  
P/N P101638

1 inch PVC Hose  
P/N P101411



P/N P101878

KF25 Exhaust Mist Filters



P/N P103219

P/N P101442  
GP Oil P/N P101441

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