

Rotary Vane Vacuum / Pressure Pump UM-27000

5.5 LPM



The Particles Plus Rotary Vane Vacuum Pump UM-27000 produces either vacuum or pressure by compressing or expanding a volume of gas within a cylindrical steel housing.

Within the housing is a compressed graphite rotor with two slots that contain compressed graphite vanes. The rotor is mounted to the shaft of a motor and is positioned off axis to the center of the steel housing. As the motor shaft rotates, the vanes are pulled outwards by centrifugal force.

The vanes then make contact and slide against the inner surface of the steel housing forming two internal and enclosed volumetric areas. The volume of which increase or decrease as the rotor turns with a vacuum being created on the increasing side and pressure on the decreasing side.

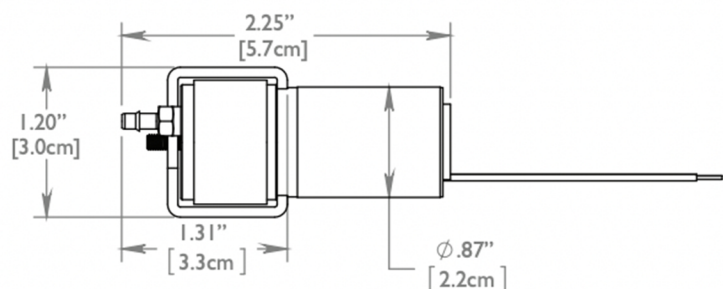
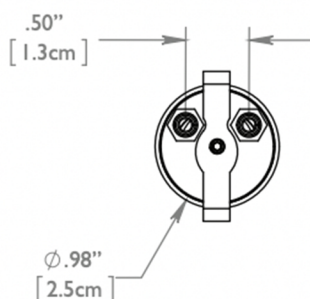
There are two ports positioned at the points of minimum volume with the increasing side being the vacuum port and decreasing side the pressure port.

Features and Benefits

- 0.19 CFM (5.5 LPM) open flow rate
- Suitable for pressure and/or vacuum
- Oil-less
- Compact design
- Low vibration
- No valves
- Nearly pulsation free
- Self-lubricating and self-adjusting vanes
- Good controllability

Typical Applications

- Automotive
- Analysis
- Automation
- Environmental
- Food and Beverage
- Instrumentation
- Laboratory
- Medical

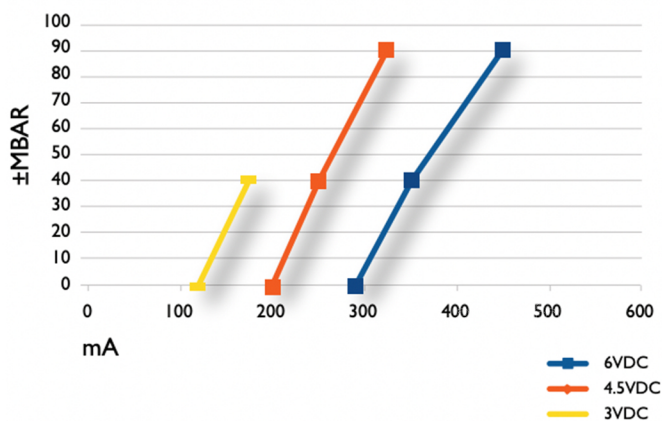




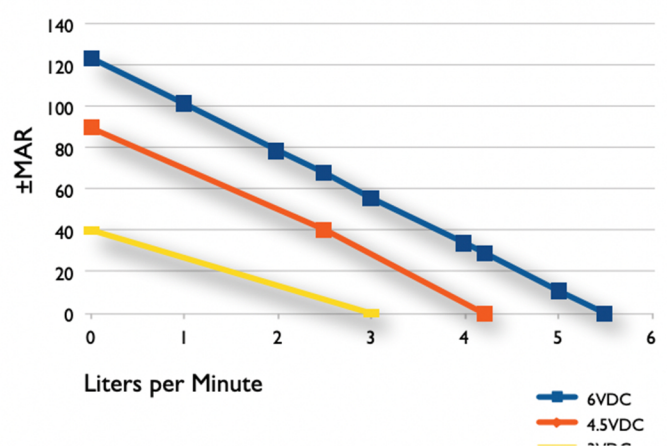
Specifications

Model	UM-27000				
Voltage (V)	Current		Flow (LPM)	Vacuum (MBAR)	dB
	MIN	MAX			
6	290	500	5.5	125	60
4.5	200	330	4.3	95	59
3	110	180	3	45	55
Dimensions (L x W)		2.25" x 1.2" (5.6 cm x 3.0 cm)			
Weight		0.22lb (0.1 kg)			
Power		6 VDC			
Operating Conditions		41° to 104°F (5° to 40°C) / 20% to 95% non-condensing			
Storage Conditions		32° to 122°F (0° to 50°C) / Up to 98% non-condensing			

Vacuum or Pressure Relative to Current



Vacuum or Pressure Relative to Flow



PAT. <https://particlepatents.com/> Additional Patents Pending.

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