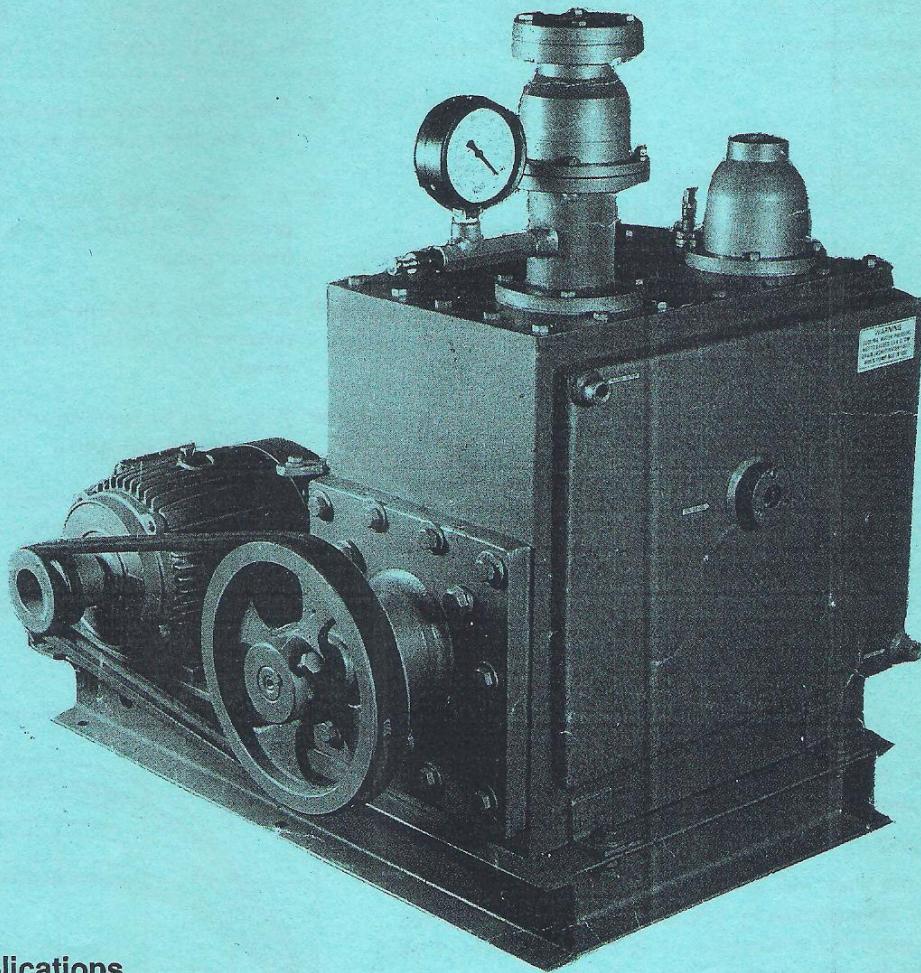


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PREMIER

OIL SEALED HIGH VACUUM PUMPS



Typical Applications

- Distillation Process
- Dehydration Process
- Filtration Process
- Thin Film Coating Process
- Packaging Operations
- Bottle Filling Operations
- Exhausting Electronic Tubes
- Vacuum Metallurgy
- Vacuum Sublimation
- Vacuum Impregnation
- Freeze-drying of Food / Drugs

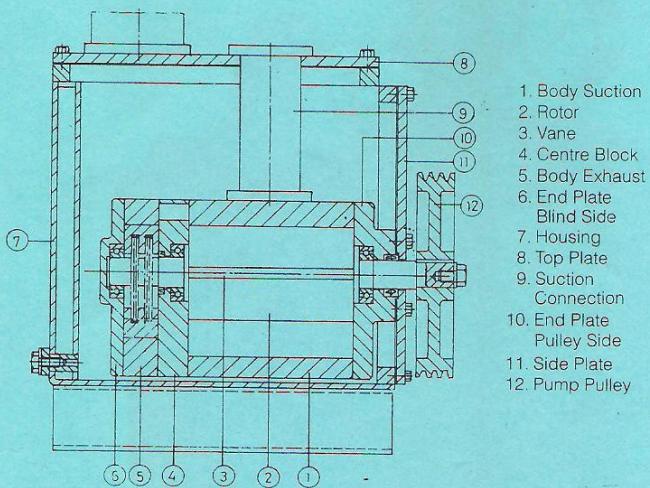
PRIME ENGINEERING INDUSTRIES

PREMIER Oil Sealed High Vacuum pumps are reputed for their rugged performance and trouble-free operation. These pumps are available for all laboratory and industrial applications in both single and double stage versions.

PREMIER High Vacuum Pumps are essentially oil sealed, rotary vane type pumps. The vanes are spring loaded, 180° apart and mounted on a cylindrical rotating member (rotor) sweeping the air from the pump intake to the exhaust through a valve and this rotor turns within the body. The repetition of this cycle of removing air or any gas from a system or any vessel results in the creation of high vacuum. An efficient oil circulation system provided within the pump serves to seal the pump from atmosphere as well as to lubricate all the moving parts.

FEATURES

- Smooth in operation
- Compact and sturdy design
- Advanced lubricating system
- Effective gas ballast
- Guaranteed ultimate vacuum
- High water vapour tolerance
- Easy maintenance



Typical sectional end view

QUALITY

All pumps are manufactured in durable material of construction. All components are inspected and tested at each and every stage of manufacture.

GAS BALLAST

All pumps are fitted with Gas Ballasts. This is a device which prevents oil contamination by process vapours. The introduction of a small amount of atmospheric air to the exhaust side of the pump causes the exhaust valve to open without condensing water vapour or other condensable vapours.

NOISE LEVEL

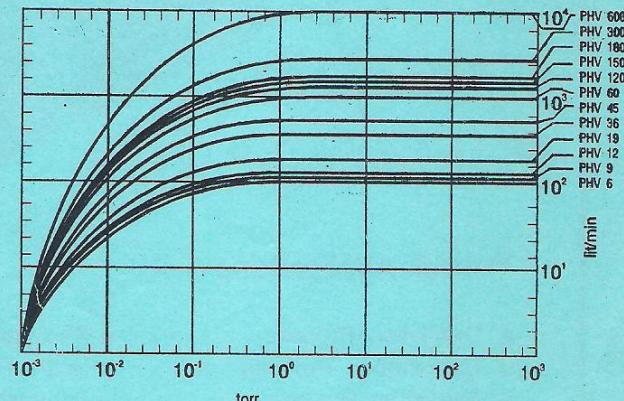
Noise and vibrations are maintained at low levels, making these pumps suitable for demands of research organisations and scientific instruments manufacturers.

SPECIFICATIONS

Model No.	Pumping Speed (lit/min)	Oil Charge (Lit)	Speed of Pump (RPM)	Motor Power (HP)
PHV 6	100	3	550	0.50
PHV 9	150	4	550	0.5
PHV 12	200	4	500	0.75
PHV 19	325	7	500	1.5
PHV 36	600	8	500	2
PHV 45	750	8	500	3
PHV 60	1000	20	500	3
PHV 120	2000	35	450	5
PHV 150	2500	35	450	7.5
PHV 180	3000	35	450	7.5
PHV 300	5000	40	450	10
PHV 600	10000	60	400	20

- Data shown above are for Double Stage pumps. Please revert to us for data on single stage pumps.
- All single stage pumps achieve an ultimate suction pressure of 5×10^{-2} torr / 6.65×10^{-2} mbar measured by Mcleod gauge.
- All double stage pumps achieve an ultimate suction pressure of 5×10^{-3} torr / 6.65×10^{-3} mbar (measured by Mcleod gauge.)
- Pumps can be supplied with single phase or three phase motors as per request.
- Pumps from PHV 19 onwards are provided with water cooling jackets. Water pressure should not exceed $1\text{kg}/\text{cm}^2$.
- Data shown are only basic guide lines and subject to modification due to constant development.

PERFORMANCE CURVES



Curves shown above are for Double Stage Pumps.

MFRS.:

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