

CACEJEN



VACUUM

Cacejen Vacuum is pleased to submit our formal proposal for the MVP 216, we quote as follows:

One Cacejen model MVP-216 two stage, oil sealed, rotary vane vacuum pump direct driven by a 60 cycle, 5.5 KW, three phase, 230/460 volt TEFC motor running at 1740 rpm. The pump is air cooled and furnished complete with adjustable gas ballast, anti suckback device, force feed lubrication, and vibramounts, The MVP-216 has a pumping speed of 128 cfm and an end vacuum capability of 5×10^{-3} Torr. Inlet port is ISO-63 and outlet port is KF-40.

List Price, FOB Temecula, California	\$14,786.00
Extended Net Price (50%Discount)	\$ 7,393.00

Design Operation Principle

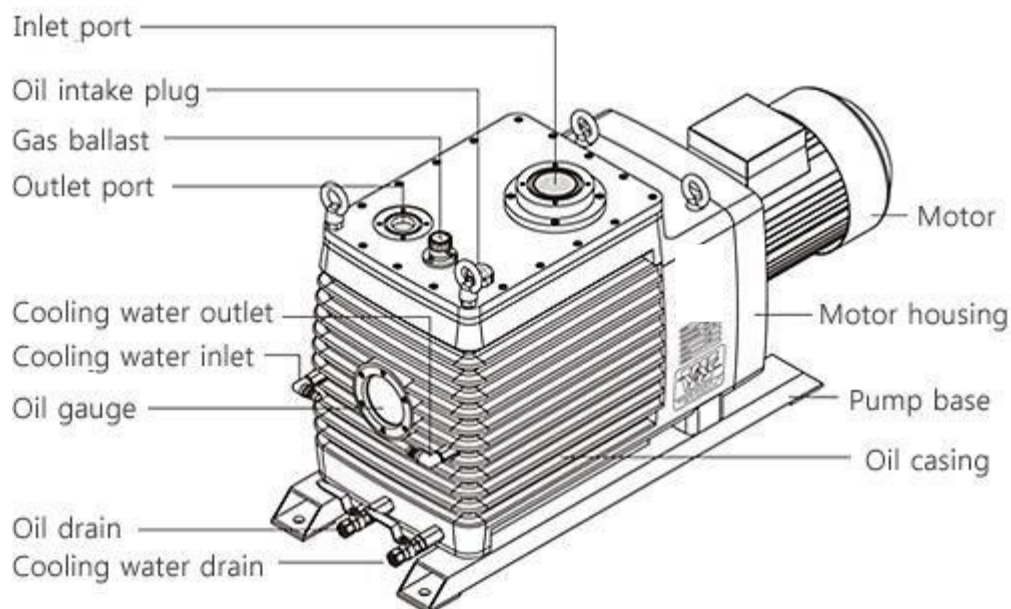
- **MVP Series** is two-stage oil sealed rotary vane vacuum pump. It is new concept out of conventional design to satisfy customer's needs.
- **The structure of the pump** It consists of top cover, oil casing, motor housing, pump module. It occupies oil anti-suckback valve and gas ballast for protecting pump.
- **Operating Principle** The pump and motor are connected by flexible coupling. As the rotor rotates two vanes, placed in rotor vane groove, turn making contact with the internal surface of the cylinder due to centrifugal force.

The inhaled gas is trapped between two vanes as the rotating vane passes through the inlet passage and this trapped gas is compressed as it rotates toward exhaust valve and eventually exhaust through valve. The vacuum oil is supplied to the moving parts for lubrication and tight sealing.

Design Features

1. Excellent ultimate vacuum and pumping speed.
2. Improved anti-suckback system to protect the pump in the event of sudden stop.
3. International standard flange.
4. Low noise level and low vibration level.
5. Constant pressure oil circulating system.
6. Convenient gas ballast valve control.
7. Simple repairing and maintenance.
8. Convenient cooling system by air-cooled

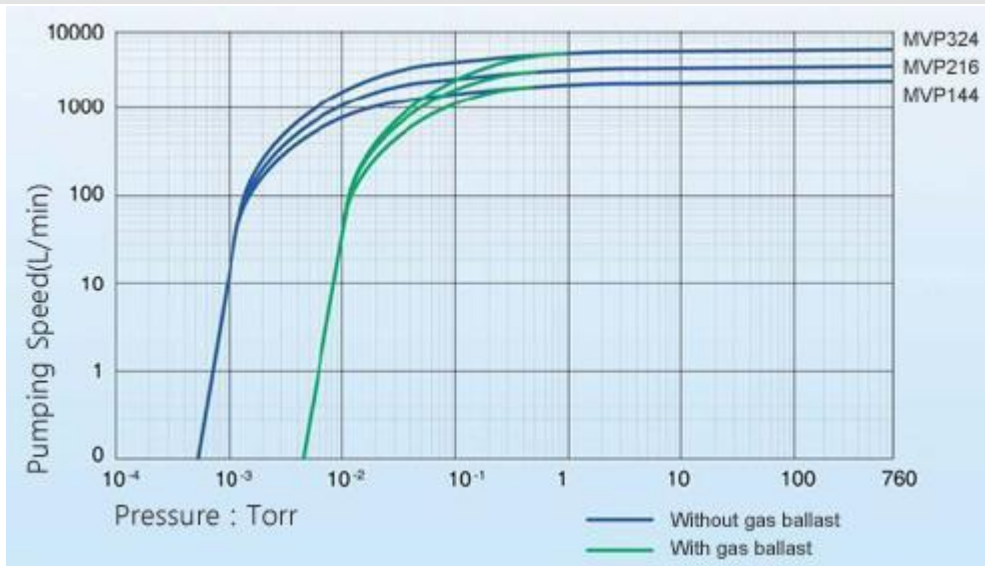
External Pump Sketch



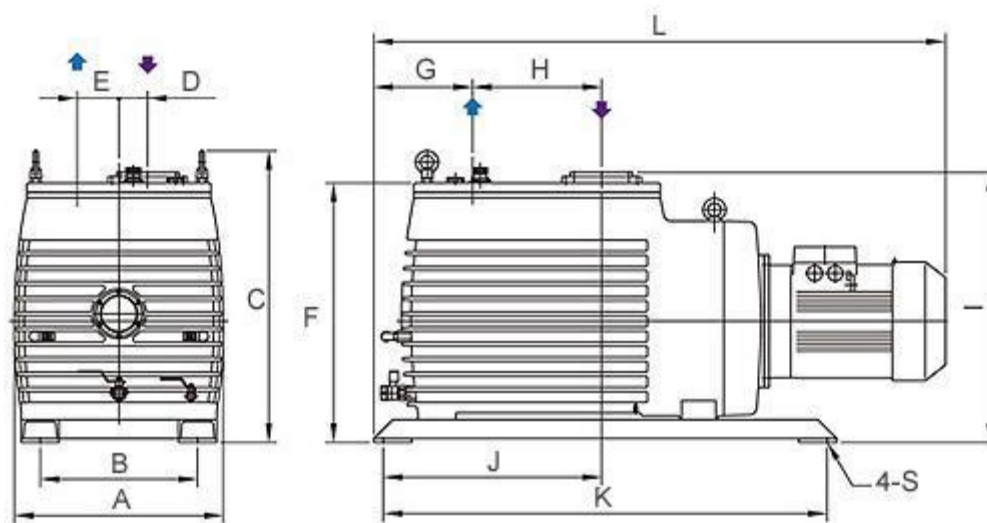
Technical Data

Description		Unit	MVP 144	MVP 216	MVP 324
Displacement Speed	60Hz	m ₃ /h	144	216	324
		L/min	2400	3600	5400
	50Hz	m ₃ /h	120	180	270
		L/min	2000	3000	4500
Ultimate Pressure	With gas ballast	torr	5×10 ⁻³		
	Without gas ballast		5×10 ⁻⁴		
Inlet Port			ISO 63		
Outlet Port			ISO 40		
Motor Power		kW	3.7	5.5	7.5
Rotational speed of Pump	60Hz	R.P.M	1750		
	50Hz		1450		
Oil Filling		Liter	11	16	17
Cooling water(less 20°C)		L/min			6
Weight		kg	172	290	358

Pumping Speed Curve

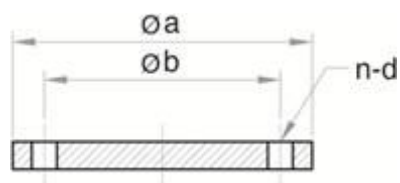


Outside Dimension (Model : MVP144, MVP216, MVP324)



Model	A	B	C	D	E	F	G	H	I	J	K	S	L
MVP144	320	230	501	40	65	414	193	175	465	348	740	Ø14	974
MVP216	400	305	575	58	75	490	195	203	528	378	805	Ø18	1101
MVP324	400	305	645	58	75	560	203	240	598	423	895	Ø18	1179

Dimensions of ISO flange



(unit:mm)
(unit:mm)

Standard	a	b	n	d
ISO40	100	80	4	M8
ISO63	130	110	4	M8



CACEJEN VACUUM

**VACUUM PUMPS
WARRANTY**

Subject to the terms and conditions hereinafter set forth in General Terms of Sale, Cacejen Vacuum Inc. (the Seller) warrants products and parts, when shipped, will be of good quality and will be free from defects in material and workmanship. This warranty applies only to the Seller's equipment, under use and service in accordance with Seller's instructions, recommendations, and ratings for installation, operating, maintenance and service of products for a period of 18 months after date of shipment. In lieu of varying conditions of installation and operation, all guarantees of performance are subject to plus or minus 5% variation.

THIS WARRANTY EXTENDS ONLY TO THE BUYER AND/OR ORIGINAL END USER, AND NO EVENT SHALL THE SELLER BE LIABLE FOR PROPERTY DAMAGE SUSTAINED BY A PERSON DESIGNATED BY THE LAW OF ANY JURISDICTION AS A THIRD-PARTY BENEFICIARY OF THIS WARRANTY OR ANY OTHER WARRANTY HELD TO SURVIVE SELLER'S DISCLAIMER.

All claims for defective products, parts, or work under this warranty must be made in writing immediately upon discovery and, in any event within 12 months from date of shipment of the applicable item and all claims for defective work and all claims for defective work must be made in writing immediately upon discovery and in any event within 12 months from the date of completion thereof by the Seller. Unless done with prior written consent of the Seller, any repairs, alterations, or disassembly of Seller's equipment shall void warranty. Installation and transportation costs are not included and defective items must be held for Seller's inspection and returned to Seller's Ex Works point upon request.

NO WARRANTIES, EXPRESSED, IMPLIED, OR STATUTORY WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF, INCLUDING WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS OF PURPOSE.

After Buyer's submission of a claim as provided above and its approval, Seller shall at its option either repair or replace its product, part or work at the original Ex Works point of shipment, or refund an equitable portion of the purchase price.

Any improper use, operation beyond capacity, substitution of parts and lubricants not recommended and approved by Seller, or any alteration or repair by others in such a manner as in Seller's judgement affects the product materially and adversely shall void this warranty.

