

Oil Rotary Vane Vacuum Pump (MVP SERIES 6 ~ 90 m³/h)

MVP Series is two-stage oil sealed rotary vane vacuum pump. It is a new concept out of conventional design to satisfy customer's needs.

It consists of pump housing, oil casing, motor housing, pump base and pump module. It occupies oil anti-suckback-valve and gas ballast for protecting pump and vacuum system.

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.



TECHNICAL DATA

DESCRIPTION		UNIT	MVP6	MVP12	MVP24	MVP36	MVP60	MVP90
Displacement speed	60Hz	m ³ /h	6	12	24	36	60	90
		L/Min	100	200	400	600	1000	1500
	50Hz	m ³ /h	5	10	20	30	50	75
		L/Min	80	170	335	500	830	1250
Ultimate pressure	Gas ballast C	Torr	5 x 10 ⁻⁴					
	Gas ballast I	Torr	5 x 10 ⁻³					
	Gas ballast II	Torr	5 x 10 ⁻²					
Water vapour tolerance		Torr	40	40	25	25	40	40
Oil filling		L	1.1	1.2	2.0	2.3	4.5	6.5
Inlet port		DN	25KF				40KF	
Outlet port		DN	25KF				40KF	
motor power		KW	0.4		0.75		1.5	2.2
Rotational speed of pump	60Hz	R.P.M	1750					
	50Hz	R.P.M	1450					
Noise level (without gas ballast)		dB	50	50	52	52	56	56
Weight		Kg	21	22.5	36	41	68	84

Oil Rotary Vane Vacuum Pump (MVP SERIES 144 ~ 540 m3/h)

TECHNICAL DATA

DESCRIPTION		UNIT	MVP144	MVP216	MVP324	MVP432	MVP540
Displacement Speed	60Hz	m3/h	144	216	324	432	540
		L/Min	2400	3600	5400	7200	9000
	50Hz	m3/h	120	180	270	360	450
		L/Min	2000	3000	4500	6000	7500
Ultimate Pressure	With gas ballast	Torr	5x10-3				
	Without gas ballast	Torr	5x10-4				
Inlet Port		mm	ISO 63			ISO 100	
Outlet Port		mm	ISO40			ISO 100	
Motor Power		kw	3.7	5.5	7.5	11	15
Rotational speed of pump	60Hz	R.P.M	1750				
	50Hz	R.P.M	1450				
Oil Filling		Liter	11	16	17	28	35
Cooling water (less than 20		L/Min			6	8	8



DESIGN FEATURE

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 and water-cooled(MVP-324/432/540)