

Vacuum Pump ▶ Oil Rotary Vacuum Pump

Double Stage Rotary Vane type Model : VD Ver. C

With high efficiency (IE3) full multi-voltage motor developed by ULVAC. For various kinds of application.



VD90C



Original
IE3 Motor

Structure	
Single stage	Double stage
Rotary vane	Rotary plunger
Direct driven	Belt driven
Air cooled	Water Cooling
Forced oil circulation	Differential pressure oil circulation
Oil back flow prevention mechanism	Back flow prevention valve
Option	
Type. F: Fluorine Oil	
Type. N: NBR (Nitrile rubber)	
Type. B: Silicon & Nitrile rubber	
Type. H: Helium tight	

- Single kind high efficient (IE3) full multi-voltage covers wide range voltage from 200 to 240V / 380 to 460V.
- Forced oil circulation makes pumping performance stable even near atmospheric pressure. Suitable for repetitive and consecutive operation between atmospheric and vacuum.
- Various specification , F , N , B and H are available in addition to standard model.

Model			VD30C	VD40C	VD60C	VD90C
Designed pumping speed [m³/h] (LPM / CFM)		50Hz	30 (500 / 17.7)	40 (670 / 23.5)	60 (1,000 / 35.3)	90 (1,500 / 53.0)
		60Hz	36 (600 / 21.2)	48 (800 / 28.3)	72 (1,200 / 42.4)	108 (1,800 / 63.6)
Ultimate pressure [Pa] (Torr / mbar)	Gas ballast port closed		0.67 (5 x 10 ⁻³ / 6.7 x 10 ⁻³)			
Motor	Output [kW] (Poles)		1.5 (4)	1.5 (4)	2.2 (4)	3.7 (4)
	Voltage [V]	50Hz	Three phase 200 to 240 / 380 to 415 (Multi-Voltage Motor)			
		60Hz	Three phase 200 to 240 / 380 to 460 (Multi-Voltage Motor)			
Standard Oil			ULVOIL R-72			
Oil capacity [L]			1.0 to 2.5		2.5 to 4.0	
Cooling method			Air cooled			
Inlet port (optional)			VG40 (KF40)		VG50 (KF50 or ISO63F)	
Outlet port (optional)			VG40 (KF40)			
Weight [kg]			58	60	90	113
Dimensions W x D x H [mm]			210 x 660 x 324	210 x 680 x 324	280 x 761 x 371	280 x 831 x 371
Applicable standard			CE, cTUVus			

Type F	○	○	○	○
Type N	○	○	n/a	n/a
Type B	○	○	n/a	n/a
Type H	○	○	○	○

Type	Target model	Spec	Remarks
F	Model : VD	J60F (Fluorine Oil)	Flammable Gas Countermeasures. Countermeasures against oil degradation by oxidizing gases.
N	Model : VD	NBR (Nitrile rubber)	When evacuating gases or solvents that FKM (fluorine rubber) is not resistant to.
K	Model : PVD Model : PKS	FKM (Fluorine rubber)	When the pump is used at high-temperature. For continuous vacuum evacuation at high pressure.
B	Model : VD	Silicone rubber + NBR (Nitrile rubber) Structure to put new oil into oil seal. Surface treatment to rotor shaft.	Brake fluid filling process.
R	Model : VS1501 / VS2401 Model : PKS	Cooling water pipe : SUS	Cooling water pipe for corrosion prevention.
H	Model : VD Model : PVD Model : PKS	He leak test. Structure to put new oil into oil seal.	Countermeasures to Flammable Gases. Helium tight.
Z	Model : PVD	Large Oil Tank.	Increase the amount of oil and extend the oil change cycle.