

FDEV Series Rotary Vane Vacuum Pump



Introduction:

FDEV is committed to the production and sales of different kinds of vacuum pumps, vacuum valves and vacuum fittings, provides first-class vacuum equipment solutions for global customers.

FDEV series rotary vane vacuum pump is direct-drive, high efficiency, oil sealed. It is two stage pump, which can get better vacuum degree than single stage rotary vane vacuum pump.

Features:

1. Optimized design and precision machining brings low vibration, low noise and long lifespan.
2. Built-in oil check valve to avoid oil-return.
3. Forced-feed lubrication ensures the lubricating of pump and guarantees internal seal in the pump during operation from atmosphere to high vacuum process.
4. Inspection and control the oil level easily through the big oil level viewport.

Main application:

FDEV series rotary vane vacuum pump has widely used in laboratory, instruments analysis, laser application, vacuum coating sputtering, semiconductor manufacturing equipment, vacuum degassing, electron microscope auxiliary pump, lighting and vacuum drying etc.

Technical data:

Model		FDEV-3	FDEV-5	FDEV-10	FDEV-16	FDEV-24	FDEV-30
Flow rate (m ³ /h) / (L/min)	50 Hz	3.6 / 60	5.4 / 90	9.9 / 165	14.4 / 240	24 / 336	30 / 500
	60 Hz	4.3 / 72	6.5 / 108	12 / 200	17.4 / 290	28 / 403	36 / 600
Ultimate vacuum (Pa)	Gas ballast off	≤5×10 ⁻¹					
	Gas ballast on	≤5	≤5	≤5	≤5	≤4	≤4
Motor power (kW)		0.4	0.4	0.4	0.55	0.75	1.1
Voltage (V)		220/380					
DIA (mm)	I.D.	KF25 / KF16	KF25 / KF16	KF25 / KF16	KF25 / KF16	KF25 / KF40	KF40 / KF25
	O.D.	KF25	KF25	KF25	KF25	KF25	KF25
Noise dB (A)		63	63	63	63	63	63
Oil volume (L)		0.7	0.7	1.1	1.2	1.7	1.9
Weight (kg)		22.5	22.5	25	27	38	43
Model		FDEV-40	FDEV-60	FDEV-90	FDEV-175	FDEV-275	
Flow rate (m ³ /h) / (L/min)	50 Hz	40 / 667	60 / 1000	90 / 1500	160 / 2656	255 / 4233	
	60 Hz	48 / 800	70 / 1200	108 / 1800	196 / 3254	306 / 5080	
Ultimate vacuum (Pa)	Gas ballast off	≤5×10 ⁻¹					
	Gas ballast on	≤4	≤4	≤4	≤2	≤2	
Motor power (kW)		1.5	2.2	2.2	5.5	7.5	
Voltage (V)		220/380	220/380	380	380	380	
DIA (mm)	I.D.	KF40 / KF25	KF40	KF40	VG80	VG80	
	O.D.	KF40	KF40	KF40	VG50	VG50	
Noise dB (A)		63	65	65	75	75	
Oil volume (L)		2.1	5	5.5	20-25	23-28	
Weight (kg)		50	87	91	210	236	

Notes:

1/ The value of ultimate vacuum in the sheet is measured by Pirani gauge when FDEV special pump oil is used, and the value should be 5X10⁻² if Mcleod gauge is used.

2/ FDEV special pump oil is recommended to guarantee the pump performance.