

ZJP/ZJ Series Roots Vacuum Pump



Introduction:

ZJP Series Roots Vacuum Pump is a positive displacement pump, also known as mechanical booster pump, which is one of the main equipment to obtain the middle and high vacuum degree. Its working principle is similar to roots blower, which use two figure 8 rotor synchronous rotation in the pump shell, so as to complete the suction and exhaust process.

Advantages:

1. Stable operation, less vibration, low noise
2. Less power consumption, good energy saving.
3. Rapid start and get the ultimate pressure in short time.
4. Pump cavity does not need lubricating oil, avoid oil vapor to pollute vacuum system, is not sensitive to tiny dust.
5. ZJP series roots vacuum pump is with overflow valve, automatically anti-overloading.

Applications:

They're widely used in vacuum smelting, vacuum welding, vacuum casting, vacuum coating, vacuum drying, vacuum dynamic experiment and chemical pharmaceutical, electric vacuum device manufacturing industries.

In view of the chemical pharmaceutical and other industries require huge vapor.

degassing capability. the sealing structure of ZJP roots vacuum pump chamber and the bearing chamber has improved, which greatly reducing the bearing cavity and gear cavity oil emulsification. Thus, ZJP roots vacuum pump is more suitable for pumping large quantities of water vapor and solvent with water ring vacuum pump.

ZJP series roots vacuum system is non oil seal type. So, it can completely avoid oil returning , oil spills and soot pollution, etc.

Technical Specification:

Model		ZJ-150	ZJ-300	ZJ-600	ZJ-1200
Pumping speed (L/s)		150	300	600	1200
Ultimate pressure (Pa)		5×10 ⁻²			
Max. allowable diff. pressure (Pa)		8×10 ³		5×10 ³	
Motor rotary speed (RPM)		3000			
Suitable motor power (kW)		2.2	4	7.5	11
Flange size	Inlet (mm)	100	150	200	250
	outlet (mm)	100	150	200	200
Cooling water consumption (L/h)		120		150	
Allowable temperature (°C)		100			
Vacuum pump oil		Mineral 100 #			
Weight (without motor) (kg)		195	250	760	860

Model		ZJP-70	ZJP-150	ZJP-300	ZJP-600	ZJP-1200	ZJP-2500
Pumping speed (L/s)		70	150	300	600	1200	2500
Ultimate pressure (Pa)		5×10 ⁻²					
Diff. pressure at overflow valve (Pa)		8×10 ³	4×10 ³	5.3×10 ³	2.7×10 ³		
Motor rotary speed (RPM)		3000					
Suitable motor power (kW)		1.1	2.2	4	7.5	11	22
Flange size	inlet (mm)	80	100	150	200	250	320
	outlet (mm)	80	100	150	200	200	320
Cooling water consumption (L/h)		-	120		150		200
Allowable temperature (°C)		100					
Vacuum pump oil		Mineral 100					
Weight (without motor) (kg)		110	205	265	780	880	1350