

SZJ Series Booster Pump

Description

The SZJ Vacuum Booster Pump is a type of positive displacement vacuum pump, also called Mechanical Booster Pump. It is one of main pumping equipment to acquire middle-level and high-level vacuum.

Its operation principle is similar as Booster Blower: simultaneous rotation of 8-shape rotors at a constant speed makes suction & exhaust of gases.

Model SZJ Vacuum Booster Pump is widely applied to vacuum gas pumping in metal and non-metal material industry, vacuum melting, vacuum surface treatment, space simulation in astronomy industry and manufacture of vacuum cooling drying equipment. If it connects with Water Ring Vacuum Pump or Liquid Ring Vacuum Pump, it can be used for vacuum distilling, vacuum drying and for vacuum crystallization, etc.

Features

1. Higher pumping speed in a larger pressure range. (1-1.3×10²Pa).
2. No oil in pump casing to avoid oil vapour polluting vacuum system.
3. Low vibration, low noise.
4. Little mechanical friction loss, and lower drive power.
5. Convenient for maintenance & service and long service life.
6. Suitable for emergent exhaust of vacuum system.
7. No gas exhaust valve, permits handling condensable vapour.
8. Must be used with backing pump. Do not start to pump at the atmosphere pressure. Run the pump when the inlet pressure reaches admissible inlet pressure by backing pump. Backing pump usually is oil seal mechanical pump? Liquid vacuum pump? e.g. such as water ring vacuum pump? Oil ring vacuum pump.
9. Most of components are exchangeable due to unique manufacturing process.

Application

SZJ Series Booster Pump is applied in pumping common gases. It is used to pump the gas containing little vapor owing to its gas ballast equipment. It is capable of pumping the gas which contains small particles of dust and dirt. It can be singly operated or used as the backing pump of other vacuum pumps. It can be applied in the industries of vacuum smelting, soaking, chemical pharmacy, simulated test, etc

Model

SZJ-30

SZJ-70

SZJ
-150A

SZJ-300

SZJ-600

SZJ

-1200A

Pumping speed(L/s)

30

70

150

300

600

1500

Ultimate Pressure(Pa)

5×10^{-2}

Maximum pressure
difference(Pa)

5300

5300

5300

4300

4300

2700

Pump speed r/min

2770

2870

2900

1450

2900

1450

Power supply kW

0.75

1.5

3

4

5.5

11

Caliber (mm)

Inlet

50

80

100

150

150

300

Outlet

40

50

100

150

150

300

Weight (kg)

66

87

128

490

495

1650

Noise LwdB(A)

?78

?78

?82

?83

?86

?90

Backing pump for recommend

KC-8

(S2X-4)

KC-15

(S2X-8)

KD-30

(S2X-15)

KD-50

(S2X
-30A)

KT-150

(S2X
-70A)

KT-300

(S2X
-70Ax2)