

Model MKBBS Vacuum Booster Pump with Overflow Valve

General

The MKBBS Series Vacuum Booster Pump with overflow valve is the derivative of the MKBS Vacuum Booster Pump. It 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 to MKBS Vacuum Booster Pump: simultaneous rotation of 8-shape rotors at a constant speed makes suction & exhaust of gases.

Model MKBBS Vacuum Booster Pump with overflow valve is widely used for 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. Protective overload function due to the automatic functioning of the overload valve. In general, it is necessary to install vacuum electric relay.
2. Must be used with backing pump.
3. The pump and backing pump can be started at the same time so that pumping time decreases.
4. Comparing the MKBS series Vacuum Booster Pump, it can operate at higher inlet pressure. It is more suitable for Booster Liquid Ring Vacuum System operating at higher pressures and it is able to exhaust large amount of condensable vapour.
5. Possesses all advantages of MKBS series Vacuum Booster Pump.
6. Higher pumping speed in a larger pressure range. ($1\sim 1.3\times 10^2\text{Pa}$).
7. No oil in pump casing to avoid oil vapour polluting vacuum system.
8. Low vibration, low noise.
9. Little mechanical friction loss, and lower drive power.
10. Easy for maintenance, service and long service life.
11. Suitable for emergent exhaust of vacuum system.
12. Most of components are exchangeable due to unique manufacturing process.

Specifications

Model

MKBB-210

MKBB-400

MKBB-890

MKBB-1680

MKBB-3370

MKBB-8200

60Hz

Speed
(r/min)

3450

3450

3450

1750

3450

1750

Displacement

(M3/hr)

210

400

890

1680

3370

8200

50Hz

Speed
(r/min)

2800

2900

2900

1450

2900

1450

Displacement

(M3/hr)

180

330

740

1400

2800

6830

Ultimate*
Pressure (Pa)

5*10⁻²

Starting
Pressure

Atmos.

Maximum
Differential

Pressure(Pa)

5300

5300

5300

4300

4300

2700

Motor
Power (kW)

0.75

1.5

3

4

5.5

11

Flange Size

Inlet
(mm)

50

80

100

150

150

300

Outlet
(mm)

40

50

100

150

150

300

Weight
(kg)

66

87

128

490

495

1650

All specifications and dimensions subject to change without notice. (*depends on backing pump).