

Screw Technology DRY VACUUM PUMPS

High Performance with Long pump life

Screw type Dry Vacuum pumps are employed worldwide in food processing, petrochemical, chemical, plastic, vacuum furnace, semiconductor, as well as many other applications in general industry.

Screw type Dry Vacuum pumps are designed for use in a variety of vacuum systems and applications.

Feature of Screw type Dry Vacuum Pumps

- · Oil and Water free Dry running operation makes clean vacuum
- Single stage design enables solid waste easy discharge and eliminate residue in the pump.
- Suitable for pumping toxic, corrosive and condensable gas by special coating.
- Not using Oil or Water pumping medium, low operation cost
- Bellows type Mech. seals prevent leak. Simple design results easy maintenance
- No metal to metal contact between screw and casing ensures long pump life
- · Short gas path through the pump make quick gas discharge
- · Screw type rotors have high volume efficiency
- · Slow rotational speed results low vibration and low noise level

Seals

Kowel and our seal manufacturers have cooperatively developed state-of-the-art products with unrivaled reliability and increased performance rates.

Bellows type Mechanical seals
 Lip seal

Performance

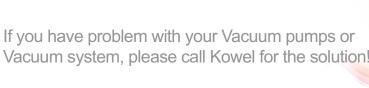
Capacity from 2.5 m³/min-13.3 m³/min

- Vacuum level ATM to 1 × 10⁻² Torr
- Special internal coating enables to pump corrosive gases
- · Precision ground helical timing gears are quieter and easier to time

Specification

Specification Type		KDP150	KDP330	KDP400	KDP800
Nominal displacement 50Hz / 60Hz (m³/hr)		120/150	270/330	360/400	720/800
Ultimate Pressure		1.3x10 ⁻² /6.6x10 ⁻³ kPa	1.3x10 ⁻² /6.6x10 ⁻³ kPa	4.0x10 ⁻³ /1.3x10 ⁻³ kPa	4.0x10 ⁻³ /1.3x10 ⁻³ kPa
(50/60Hz)		(0.1/0.05Torr)	(0.1/0.05Torr)	(0.03/0.01Torr)	(0.03/0.01Torr)
Power Kw (50/60Hz)		3.7/5.5	7.5/11	11/15	18.5/22
Rotation (R.P.M)50/60Hz		2900/3500			
Port size	Suction (A)	40	50	65	100
	Discharge (A)	40	40	50	65
Gear Oil (ℓ)		1.3	1.6	2	4
Cooling Water (/min)		4	8	11	20
Weight (Kg, Pump only)		220Kg	310Kg	400Kg	600Kg

^{*} Specifications are subject to change without notice to improve product quality.





Optional materials and Coatings

Standard construction materials are ductile iron screw rotors, shafts and casing. However, the following are also available:

- Special Coating: Teflon(PFA, PTFE), NIFA, NIFLON.
- · Special O-rings such as Kalrez, Teflon

Configuration

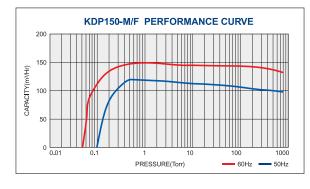
- Bare shaft unit or complete packages with base, silencer, filter, motor, belt drive or coupling, valves and controls.
- Multistage Vacuum Unit

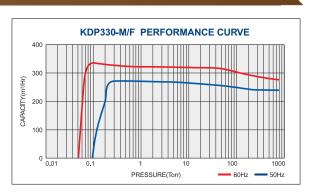
Extra Test

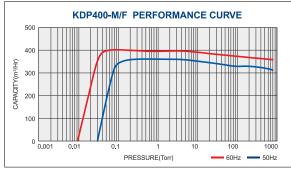
- · Leak detection
- Noise
- Vibration

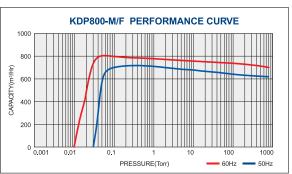
- · Hydrostatic Pressure
- Customer specified

Performance Curve









^{*} The above performance curves are subject to change according to the actual conditions of process.

VACUUM is our business!



C-Flanged Model

C-Flanged vacuum pumps allow you to mount the motor and your unit by its port fittings, simplifying installation. Size available up to 30Hp models.

Vacuum Package Systems

Process requiring a complete Vacuum package may choose from a wide range of standard Vacuum package designed and engineered for specific applications.

- · Factory designed & engineered
- Two or Three-stage system

- Capacity from 6 m³/min 300 m³/min
- · Vacuum package system for special application

Technical Assistance

Should you require technical support or application assistance, our experienced and well trained engineers will support you with technical & application data and more.

Others

- Certifications
- · Long term storage preparation
- Sound Enclosure
- Extended warranty

Major Application

- Chemical & Petrochemical Solvent recovery, Evaporating, Drying, Molecular distillation, Dehydration,
 Degassing, Plasticizer, Impregnation, Esterification, Polymerization, Extrusion
- · Food-Freeze drying, Packing
- Specialty Chemical manufacturing
- Others

- · Semiconductor-C.V.D, P.V.D Dry Etching
- · Pharmaceutical manufacturing



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