

[Screw Technology, The clear solutions]



KOWEL PRECISION CO., LTD.

HEAD OFFICE & FACTORY

TEL. 82-51-603-0321 FAX. 82-51-831-0327~8
Home Page. www.kowel.com E-mail. kowel@kowel.com

SEOUL OFFICE

TEL. 82-31-436-0170 FAX. 82-31-436-0176

Represented by

KDPH Series

Screw Technology The clear solutions



30% less power consumption
Much lower temperature
New version Dry Vacuum Pump!

KOWEL

Why KOWEL ?

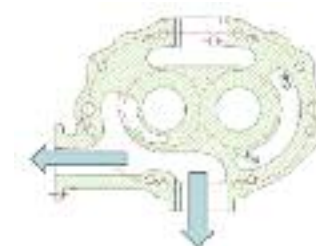
Better Quality,
Technology & Reliability!

KDPH Series

These days, Screw type Dry Vacuum pumps are widely employed worldwide in chemical, petrochemical, food processing, plastics, vacuum furnace, semiconductor as well as many other application in general industries. Now, Kowel introduces newly improved Screw type Dry Vacuum pumps, KDPH series. For simplicity and space saving, from model KDPH120 to KDPH2700 are available with flanged adaptors for mounting various standards C-face motor (up to 55Kw) directly to the Vacuum pumps, eliminating the need for a separate base frame mounted assembly and coupling guard for the vacuum pumps.

Advantages of KDPH Series are :

- Low power consumption 30% less than current design save a lot of utility cost.
- Reduce discharge temperature greatly & close to T4 requirement.
- Improved capacity & Vacuum level.
- Smaller & compact design reduced installation space.
- Mostly C-flange design simplified mounting reduce noise level and eliminate shaft alignment.
- No need for Discharge cooling purge. (For more details, please contact us)
- Bottom discharge is available as an option.



Features of Screw type Dry Vacuum Pumps

- Oil & Water free Dry running operation makes clean vacuum
- No metal-metal contact between Screw and Casing ensures long pump life
- Newly designed Screw rotors have high volume efficiency
- Not using Oil or Water as pumping medium, low operation cost
- Single stage design enables solid waste easy discharge and eliminate residue in the pump
- Short gas path through the pump make quick gas discharge
- Suitable for pumping Toxic, Corrosive and condensable gas by optional special coating
- Simple design results easy maintenance
- Slow rotational speed results low vibration and low noise level
- Mech. seal prevent leak

C-Flange Production

C-flanged models allow you to mount the motor to our pump by its port fittings, simplifying installation. Available size form KDPH120

Extra Test

- Leak detection
- Noise & Vibration
- Hydrostatic Pressure
- Customer specified

New Technology

KDPH Series

Materials Specification & Coating

- Screw, Casing & Shaft - Ductile Iron(Non-coating)
- Seals configuration ;
 - Drive : Plate Spring(or Bellows) type Mech. seal & Lip seals / - Non Drive : Double Lip seals
- Timing Gear - Heat treated Alloy Steel, Helical, Precision grounded.
- O-ring - Viton, However, the followings are also available
- Special coatings - Teflon(PTFE, PFA), NIFLON, NIFA, PEEK & etc
- Special Mech. Seals like Hastelloy
- Special O-rings such as Kalrez, Teflon

Specification

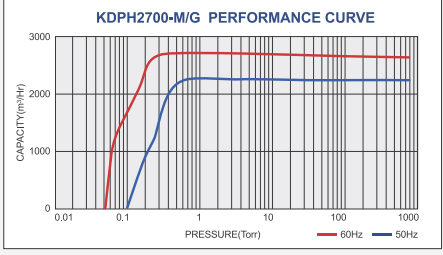
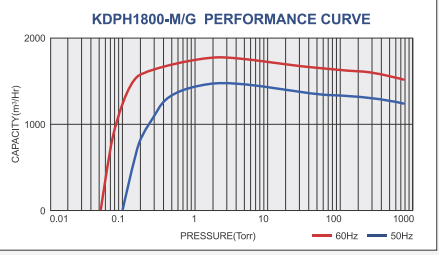
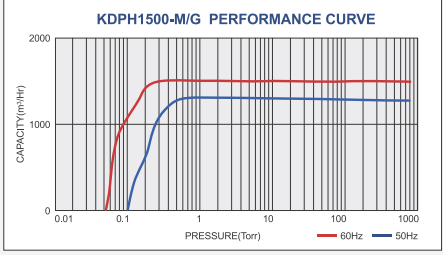
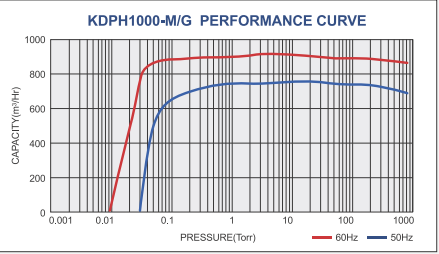
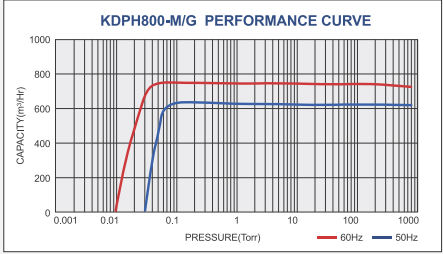
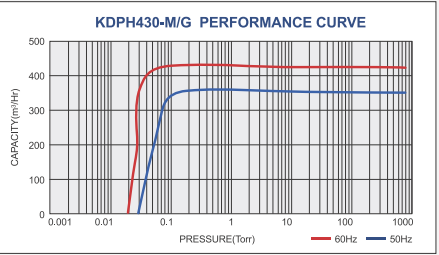
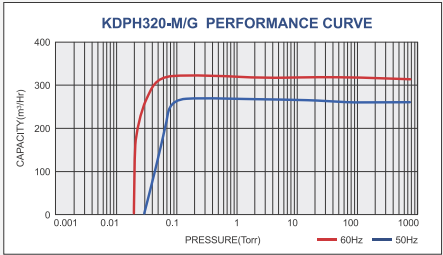
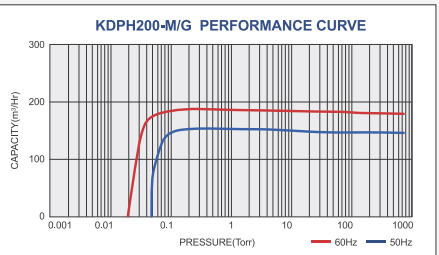
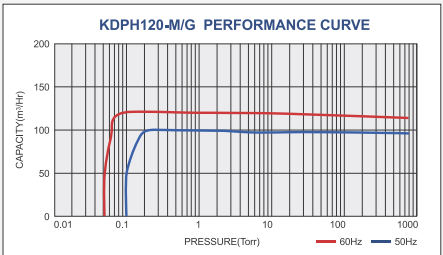
Specification	Type	KDPH 120	KDPH 200	KDPH 320	KDPH 430	KDPH 800
Nominal displacement 50Hz / 60Hz (m3/hr)		100/120	155/187	267/320	358/430	625/750
Ultimate Pressure (50/60Hz)		1.3x10 ⁻² /6.6x10 ⁻³ kPa (0.1/0.05Torr)	6.6x10 ⁻³ /2.7x10 ⁻³ kPa (0.05/0.02Torr)	4.0x10 ⁻³ /2.7x10 ⁻³ kPa (0.03/0.02Torr)	4.0x10 ⁻³ /2.7x10 ⁻³ kPa (0.03/0.02Torr)	4.0x10 ⁻³ /1.3x10 ⁻³ kPa (0.03/0.01Torr)
Power (Kw/ Hp)		2.2/30	5.5/7.5	7.5/10	11/15	15/20
Rotation (R.P.M)50/60Hz		2900/3500				
Port size	Suction (A)	40	40	50	65	100
	Discharge (A)	40	40	40	50	65
Cooling Water (ℓ/min)		3	5	8	11	20
Seal Type	Front End Plate	Plate Spring(or Bellows) type Mechanical Seals & Lip Seals				
	Rear End Plate	Lip Seals				
	Front End Cover (Drive Shaft)	Plate Spring(or Bellows) type Mechanical Seal				
Weight (Pump only)		150Kg	220Kg	300Kg	400Kg	600Kg

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

Specification	Type	KDPH 1000	KDPH 1500	KDPH 1800	KDPH 2700
Nominal displacement 50Hz / 60Hz (m3/hr)		750/900	1300/1500	1500/1800	2250/2700
Ultimate Pressure (50/60Hz)		4.0x10 ⁻³ /1.3x10 ⁻³ kPa (0.03/0.01Torr)	1.3x10 ⁻² /6.6x10 ⁻³ kPa (0.1/0.05Torr)	1.3x10 ⁻² /6.6x10 ⁻³ kPa (0.1/0.05Torr)	1.3x10 ⁻² /6.6x10 ⁻³ kPa (0.1/0.05Torr)
Power (Kw/ Hp)		18.5/25	37/50	45/60	55/75
Rotation (R.P.M)50/60Hz		2900/3500	1450/1750		
Port size	Suction (A)	100	125	125	150
	Discharge (A)	65	80	80	100
Cooling Water (ℓ/min)		20	36	40	48
Seal Type	Front End Plate	Plate Spring(or Bellows) type Mechanical Seals & Lip Seals			
	Rear End Plate	Lip Seals			
	Front End Cover (Drive Shaft)	Plate Spring(or Bellows) type Mechanical Seal			
Weight (Pump only)		600kg	1350Kg	1350Kg	1650Kg

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

Performance Curve

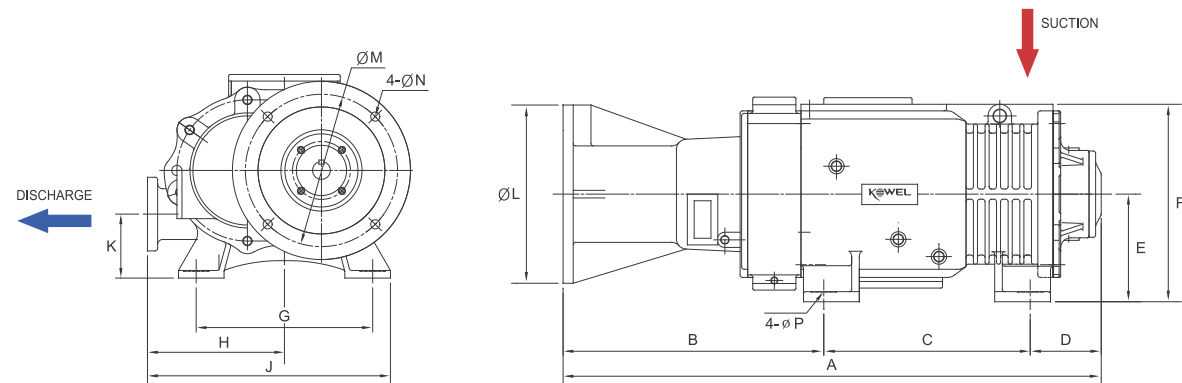


* The above performance curves are subject to change according to the actual conditions of process.

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KDPH Series

Dimension



Size Model	A	B	C	D	E	F	G	H	J	K	ØL
KDPH120	621	328	200	93	140	262	260	150	300	50	250
KDPH200	760	348	301	111	163	294	248	204	355	95	250
KDPH320	857.5	404.5	334	119	178	326	270	225	380	97	300
KDPH430	993	468	392	133	192	352	310	255	445	96	350
KDPH800	1131	514	407	140	211.5	388	348	270	479	126	350
KDPH1000	1131	514	407	140	211.5	388	348	270	479	126	350
KDPH1500	1513	642	649	222	290	529	440	375	635	180	450
KDPH1800	1513	642	649	222	290	529	440	375	635	180	450
KDPH2700	1684	731	685	268	320	585	444	421	683	210	550

Vacuum Package System

Screw type Dry pump are designed and manufactured for use in a variety of vacuum systems and applications. Process requiring a complete Vacuum package may choose from a wide range of standard Vacuum package designed and engineered for specific applications.

Major Application

- Chemical & Petrochemical - Solvent recovery, Evaporating, Drying, Molecular distillation, Dehydration, Degassing, Plasticizer, Impregnation, Esterification, Polymerization, Extrusion
- Food- Freeze drying, Packing
- Semiconductor - C.V.D., Dry Etching
- Specialty Chemical Manufacturing
- Pharmaceutical manufacturing
- Others

Technical Assistance Sale & Service

Should you require technical support or application assistance, our experienced and well trained engineers will support you with technical & application data and more. Also, Kowel's Worldwide partner and representatives will answer all your inquiries and provide you rapid parts supply, service assistance and more. This rapid reply will make your process stable and minimize process down time. Call Kowel for all your requirments!

Others

- Certifications
- Long term storage preparation
- Extended warranty

