

水环真空泵及压缩机

Liquid Ring Vacuum Pumps And Compressors

Complete Product Series

Products include 2BVX, 2BVF, 2BEX, 2BEK series, as well as 2BYS, KZF, 2BW series complete sets of devices. Single pumps and a variety of integrated complete sets are available to meet different needs

Good Quality

Excellent processing system and reliable quality system to ensure the excellent quality of products

Advanced Product Design

Optimized hydraulic design, high-efficiency area width, energy saving and environmental protection
Single-stage impeller wheel, flat disk structure design, reliable operation, easy maintenance

Widely application

Products are widely used in electricity, chemical, paper, tobacco, coal, mining, pharmaceutical, nitrogen, sugar and other fields



Catalogue

2BVX, 2BVF Series Water Ring Vacuum Pump and Compressor.....	01
2BEX Series Water Ring Vacuum Pump and Compressor.....	08
2BEX Series Water Ring Vacuum Pump Performance Curve.....	11
2BEX Series Water Ring Compressor Performance Curve.....	21
2BEX Series Water Ring Vacuum Pump and Compressor Installation Size.....	33
2BEX Series Water Ring Vacuum Pump Matching Table.....	50
2BEK Series Water Ring Vacuum Pump and Compressor.....	57
2BEX Series Water Ring Vacuum Pump Performance Curve.....	60
2BEX Series Water Ring Vacuum Pump Installation Size.....	68
2BEK Series Water Ring Vacuum Pump Matching Table.....	71
KVDP Series Water Ring Vacuum Pump.....	75
YS Series Vacuum Water Diversion Device.....	88
KZF Series Negative Pressure Station.....	97
KZF Series Negative Pressure Station.....	100
2BWD Series Complete Sets of Device.....	103
Appendix.....	111

2BVX Series Water Ring Vacuum Pump

2BVF Series Water Ring Vacuum Pump

Overview

2BVX series water ring vacuum pump, 2BVF series water ring vacuum pump is our company in summary of many years of scientific research results and production experience on the basis of the combination of international advanced technology, research and development of a new generation of energy-efficient products. The product is compact, smooth and reliable, efficient and easy to install and maintain. Have a variety of configurations to meet user requirements, and can provide complete sets of units including pumps, gas and water separators, heat exchangers, valves, instruments, cavitation protection devices, internal connection lines, etc., to provide users with the ideal solution.



Technical Indicator

Gas range: 6m³/h-500m³/h

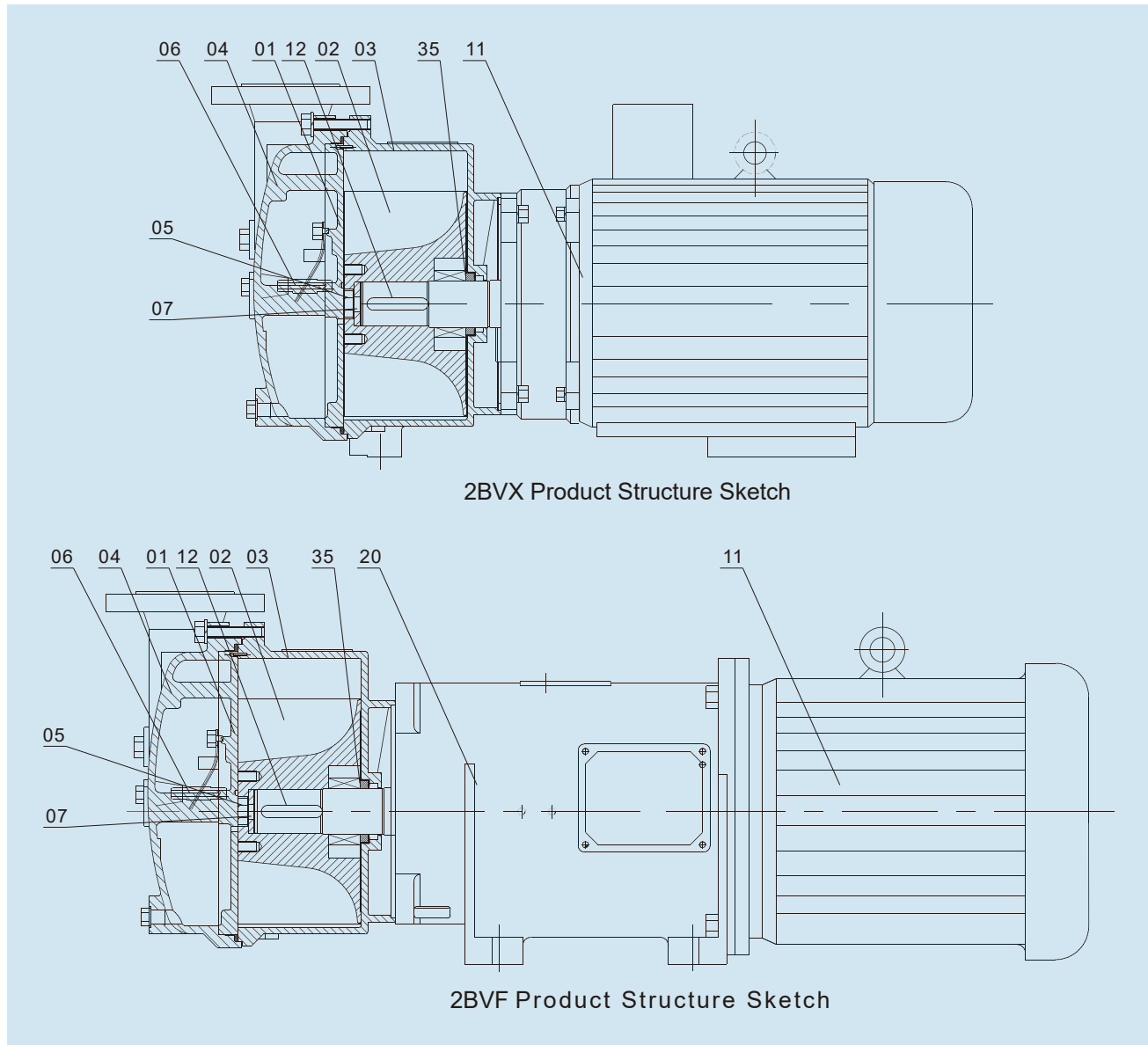
Minimum suction pressure: 33hPa abs, if the air ejector is used, the minimum suction pressure up to 10 hPa abs

Maximum exhaust pressure: 0.26MPa abs

Application Field

Vacuum filtration	Chemical filtration plants, chemical treatment plants, iron ore mills, mining, phosphorus fertilizer plants, paper mills, poultry processing plants, coal mills	Steam recovery	Distillers, loading and unloading stations
		Water pump drainage	Water plant
		Condenser tank water replenishment	Power station
Vacuum distillation	Milk mills, food factories, chemical plants, pulp mills	Drying	Chemical, pharmaceutical manufacturing
Vacuum disinfection	Hospitals, infirmaries, laboratories	Wood treatment/drying	
Extrusion molding	Plastics industry	Pharmaceutical/laboratory vacuum	
Molding	Nj_qrga, ethylene, rubber, tires and other manufacturing industries	Solvent recovery	
Impregnated	Food processing, wood processing, textile mills, plywood factories, utility pole manufacturing and so on	Soil purification	
		Vacuum packaging	
Liquid degassing	Food processing, ice softening, bottling plant	Extraction	
Compressed air recycled	Pulp, steel, automotive, glass, chemical	Leather	
Food processing	Food processing plants, milk mills	Canned	

Product Structure Drawing and Structural Feature



01 Dispenser 02 Impeller 03 Casing 04 Pump cover 05 Hexagonal Screw 06 Cavitation Protection Tube 07 Adjust Gasket 11 (2BVX with extended shaft) Motor 12 Key 20 Bay 35 Mechanical Seal

- 1、 2BVX machine pump coaxial direct design, simple structure, compact, space-saving; 2BVF bay design, configuration standard explosion-proof motor, to meet the use of flammable, explosive hazardous environment;
- 2、 The use of mechanical seals as a standard configuration, to avoid leakage, reduce the amount of maintenance;
- 3、 Smooth operation, low noise;
- 4、 Stainless steel impeller as a conventional supply material, high strength, durable, and improve the corrosion resistance of the pump;
- 5、 Unique flexible exhaust port design, will not produce over compression, to ensure that the pump in its performance range of the best efficiency.

The Model Represent Method

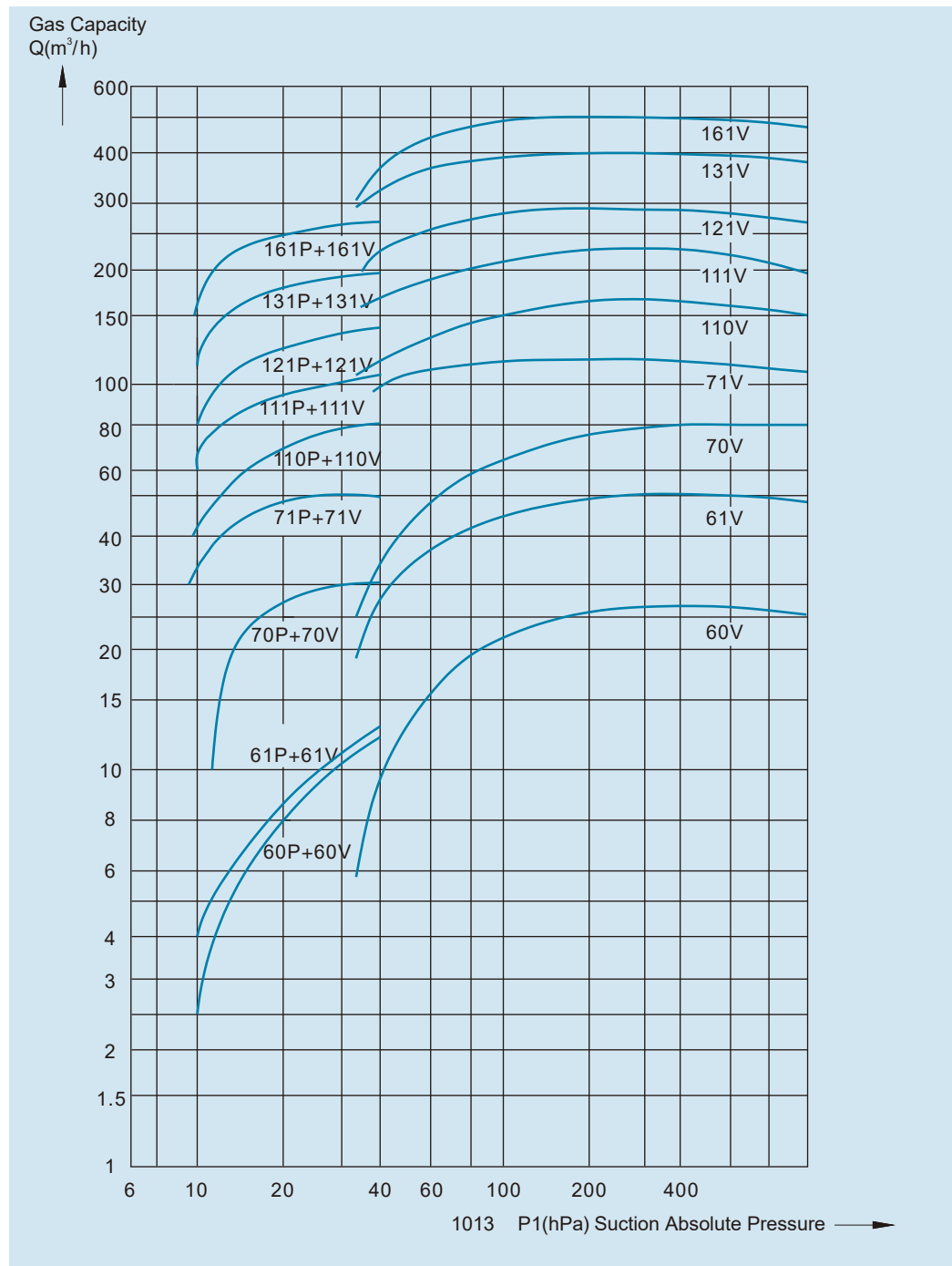
For example:2BVX121F-0ADP

2BVX	Vacuum pump series number				
2BVF	Vacuum pump series number				
	121F	Impeller Code			
		0	The minimum suction absolute pressure of the pump is 33hPa		
			A	Casing, pump cover, dispenser material is gray iron, impeller 304	
			E	Casing, pump cover, impeller, dispenser material is 304	
			H	Casing, pump cover, impeller, dispenser material is 316	
			F	Casing, pump cover, impeller, dispenser material is 316L	
			M	Other materials	
					No letters, no gas and water separator
				D	Equipped with overhead gas and water separator
				G	With tank-type air-water separator (side)
					No letters, no atmospheric ejector
				P	Equipped with an atmospheric ejector

Performance Parameter Table

Model	Motor Power kW	Maximum Gas Capacity		Minimum Suction Expression		Pump speed r/min	Working Fluid Capacity m ³ /min	Weight kg
		m ³ /h	m ³ /min	Absolute hPa	Relative MPa			
2BVX060F	1.1	27	0.45	33	-0.098	2840	0.12	33
2BVF060F								62
2BVX061F	1.5	52	0.87			2840	0.12	34
2BVF061F								71
2BVX070F	3	80	1.33			2830	0.15	54
2BVF070F								91
2BVX071F	4	110	1.83			2890	0.25	62
2BVF071F								105
2BVX110F	4	165	2.75			1440	0.4	97
2BVF110F								152
2BVX111F	5.5	230	3.83			1445	0.5	113
2BVF111F								208
2BVX121F	7.5	280	4.67			1445	0.6	144
2BVF121F								238
2BVX131F	11	400	6.67			1460	0.9	194
2BVF131F								317
2BVX161F	15	500	8.3			970	1.2	340
2BVF161F								445

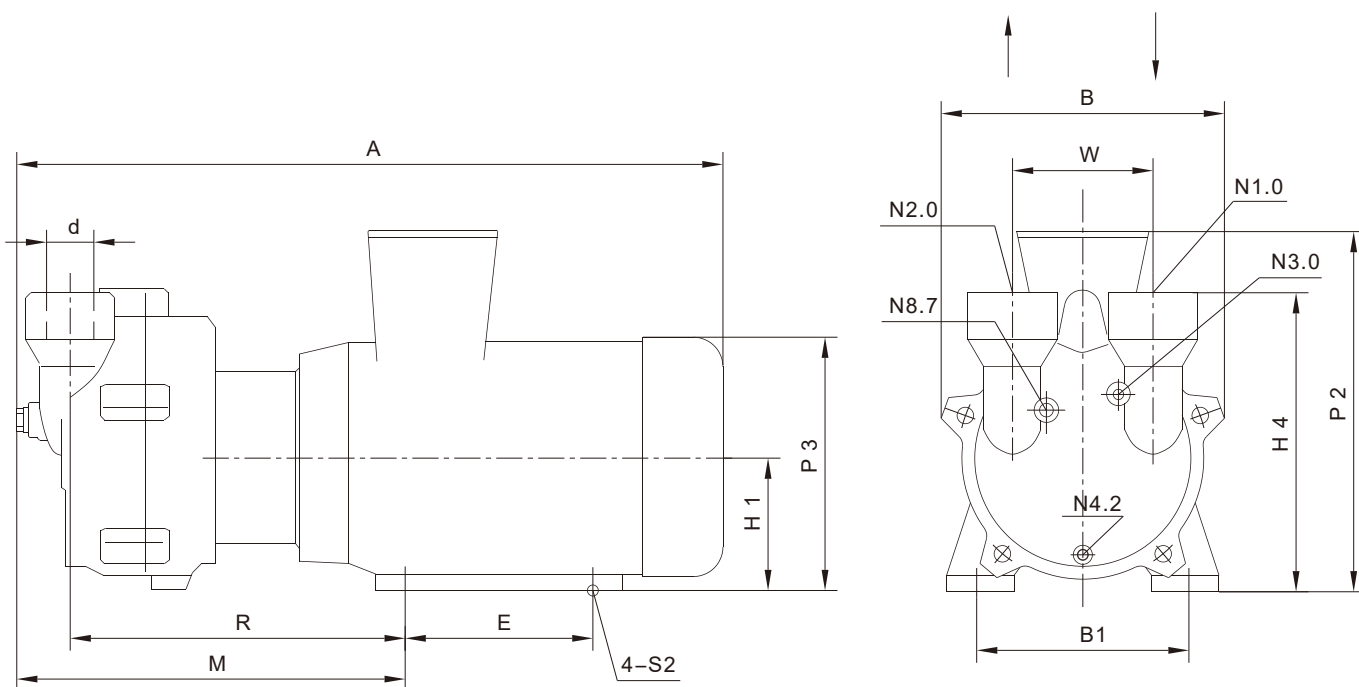
Hydraulic Coverage



1、 The performance of the upper column is based on the inhaled gas as saturated air, suction temperature of 20℃, operating fluid temperature of 15℃, exhaust pressure for a standard atmospheric pressure 1013.25 hpa;

2、 The left curve of the figure above is the performance curve of the atmospheric ejector for the vacuum pump. For example, 70v is a 2BVX070F, 2BVF070F performance curve, the 70P+70V is the performance curve of the 2BVX070F and 2BVF070F with atmospheric ejectors.

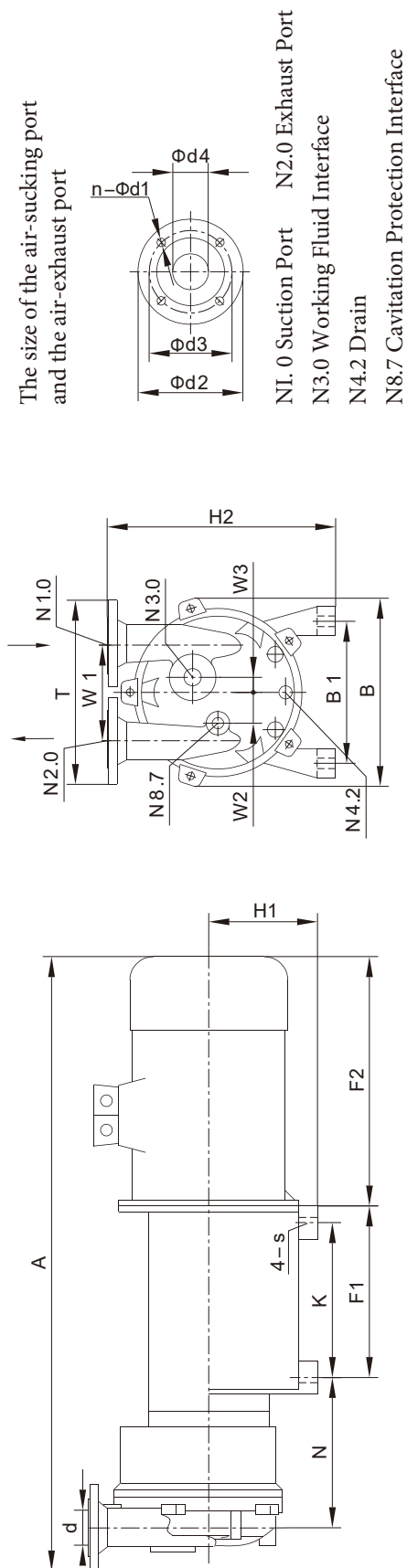
2BVX 060~2BVX 071 Dimension Installation Diagram



N1.0 Suction Port N2.0 Exhaust Port
 N3.0 Working Fluid Interface N4.2 Drain
 N8.7 Cavitation Protection Interface

Model	A	B	B1	R	E	M	H1	H2
2BVX 060F	455	186	125	200	100	244	80	185
2BVX 061F	476	186	140	236	100	263	90	195
2BVX 070F	545	223	160	252	140	280	100	222
2BVX 071F	566	223	190	278	140	309	112	234
Model	W	d	N3.0	N4.2	N8.7	S2	P2	P3
2BVX 060F	110	Rp1	Rp3/8	Rp1/4	Rp3/8	Φ10	250	180
2BVX 061F	110	Rp1	Rp3/8	Rp1/4	Rp3/8	Φ10	250	180
2BVX 070F	110	Rp1 1/2	Rp3/8	Rp1/4	Rp3/8	Φ12	270	203
2BVX 071F	110	Rp1 1/2	Rp3/8	Rp1/4	Rp3/8	Φ12	300	225

2BVF Dimension Installation Diagram



Model	A	B	B1	F1	F2	H1	H4	K	N	T	W1	W2	W3	s	d	d1	d2	d3	d4	n	N3.0	N4.2	N8.7
2BVF 060F	900	186	180	275	320	140	195	240	195	160	110	22.5	21	14	RP1						RP3/4	RP3/8	RP3/8
2BVF 061F	930	186	180	275	340	140	195	240	220	160	110	22.5	21	14	RP1						RP3/4	RP3/8	RP3/8
2BVF 070F	1055	228	180	290	450	140	222	250	252	178	110	33	27	14	RP1 1/2						RP3/4	RP3/8	RP3/8
2BVF 071F	1080	228	180	290	450	140	234	250	278	178	110	33	27	14	RP1 1/2						RP3/4	RP3/8	RP3/8
2BVF 110F	1105	325	290	340	450	160	381	290	281	340	180	52	27	20	DN50	18	165	125	52	4	RP3/4	RP3/8	RP3/8
2BVF 111F	1220	325	300	360	470	180	401	320	311	340	180	52	27	20	DN50	18	165	125	52	4	RP3/4	RP3/8	RP3/8
2BVF 121F	1355	347	300	360	575	180	415	320	328	381.5	200	57	29	20	DN65	18	185	145	66.5	4	RP3/4	RP3/8	RP3/8
2BVF 131F	1490	377	330	460	585	215	467	415	353	381.5	200	62.5	32	22	DN65	18	185	145	66.5	4	RP3/4	RP3/8	RP3/8
2BVF 161F	1605	479	330	460	640	215	526	415	402	450	250	81	41	22	DN80	18	205	160	80	8	RP3/4	RP3/8	RP3/8

2BEX Series Water Ring Vacuum Pump and Compressor

Overview

2BEX series of water ring vacuum pumps and compressors, is my company in many years of scientific research results And production experience on the basis of the combination of international similar products advanced technology, through the market Research and analysis, research and development of energy-efficient products. 2BEX series water ring vacuum pump and compressor, the working medium is warm and clean water, using a single-stage single-acting structure form, with It has the advantages of simple structure, reliable operation, high efficiency and energy saving, and can adapt to the drainage amount Large, load shock fluctuations and other adverse operating conditions. The pump set is a horizontal structure, which is convenient for the user repair. According to user demand, there are direct transmission, belt wheel drive and reducer transmission.

Products after careful manufacturing and perfect quality control, to achieve the leading domestic water Flat. Our company has been ISO9001 quality certification, product quality is fully guaranteed.

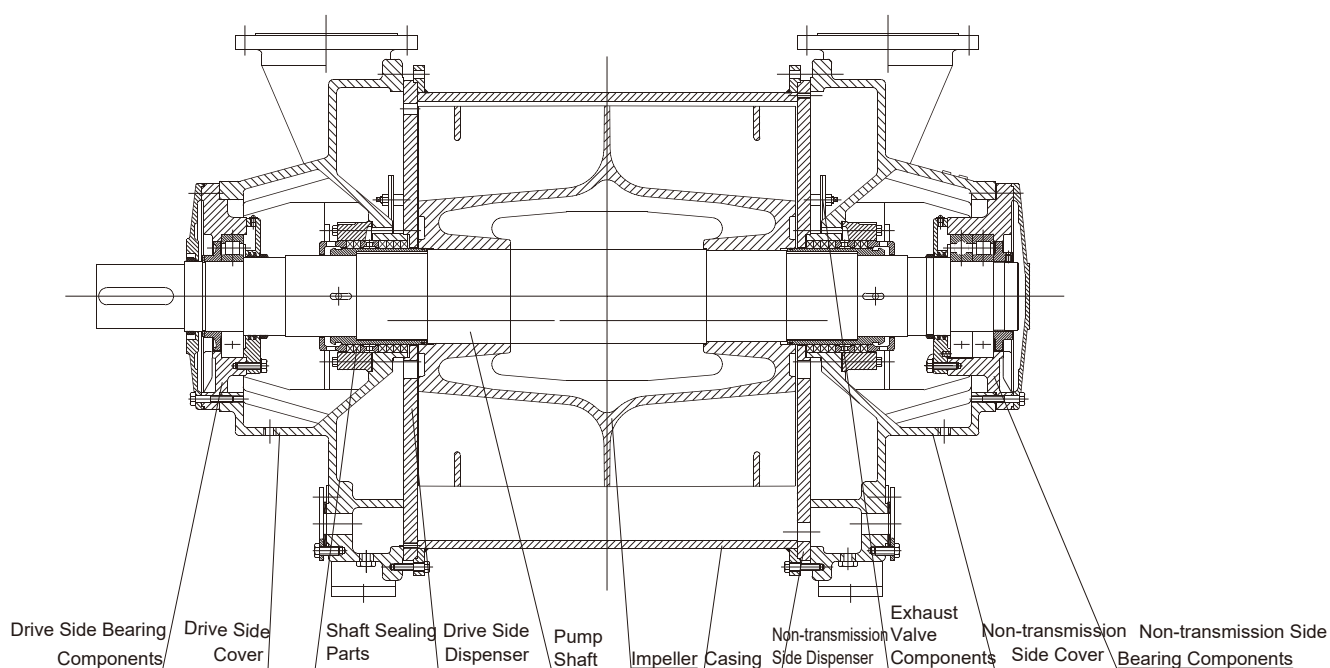


This series implements the JB/T7255 standard.

Application

This product is widely used in paper, cigarette, pharmaceutical, sugar, textile, food, metallurgy, mineral processing, mining, coal washing, fertilizer, refining, chemical, electricity and electronics and other industrial sectors. For vacuum evaporation, vacuum concentration, Vacuum resurgence, vacuum impregnation, vacuum drying, vacuum smelting, vacuuming, vacuum handling, vacuum simulation, gas recovery, decompression distillation and other processes, used to absorb insoluble in water, does not contain solid particles of gas, so that the pumping system forms a vacuum. Because in the course of work, the suction of gas is equal temperature, the pump does not rub each other's entire surface, so it is very suitable for pumping flammable, explosive or temperature rise easy to break down the gas.

Product Structure Map and Structural Feature



- 1)Single-stage single action, axial infested exhaust, simple structure, convenient maintenance.
- 2)The large diameter pump is equipped with both a horizontal and a vertical exhaust port for user convenience.
- 3)Equipped with an automatic drain valve, control the starting fluid level of the pump to avoid overload start-up.
- 4)The rotor clearance adjustment mechanism precisely guarantees the gap between the impeller end face and the dispenser surface, thus ensuring the performance of the pump.
- 5)The exhaust port with flexible valve plate automatically adjusts the exhaust angle so that the pump can operate efficiently in different inhalation states.
- 6)The impeller end face has a step-shaped design, which reduces the pump's sensitivity to dust and water fouling in the medium. Large-size impellers, strengthened on impellers.
- 7)The ring structure has been improved to prevent impurities from retention and to improve the impact of fouling on the pump. The pumped gas is allowed to carry non-particle dust.
- 8)Filler pressure cap is a half-part structure, can be removed as a whole, more convenient to replace the filler.
- 9)By adjusting the assembly angle of the sealing letter body, the function of the internal circulation and/or external supply of the sealing letter cooling water can be realized to meet the different shaft sealing needs. Small size pump, with fillers and mechanical seals in two forms of shaft sealing.
- 10)The shaft seal position is equipped with a chrome steel protective sheath.
- 11)The axial and radial loads of the pump are borne by two different sets of bearings, which ensure the long-term continuous and reliable operation of the pump.
- 12)When equipped with a heat exchanger, the working fluid can be recycled, reducing the loss of water. Through the self-absorption function of the vacuum pump, the cooled work fluid is introduced into the pump without the need for additional boosters.
- 13)Using the Casing structure with partition, a pump can be adapted to the use requirements of two different operating conditions.

The Model Represent Method

For example: 2 BEX353-0BD4-590

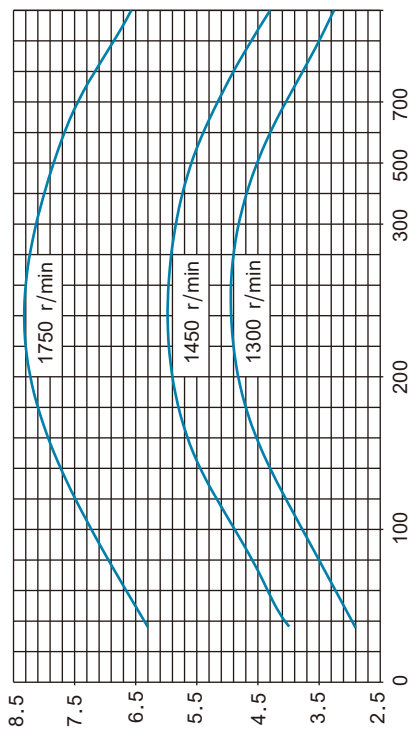
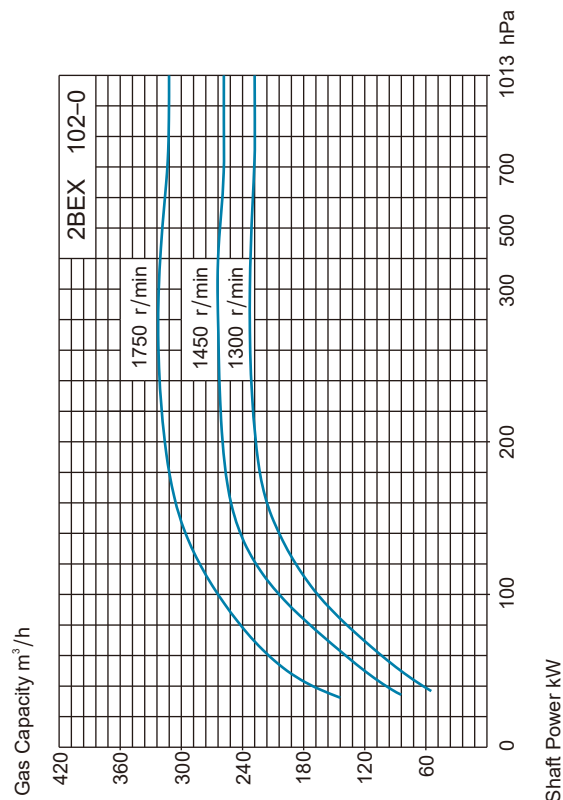
2BEX	Vacuum pump series number				
	353	Pump specification code			
		0	Pump minimum suction absolute pressure 33hPa		
		1	Pump minimum suction absolute pressure 160hPa		
		8	Exhaust port positive pressure (compressor)		
			B	Casing, impeller, dispenser material is cast iron carbon steel	
			E	Casing, impeller, dispenser material is 304	
			H	Casing, impeller, dispenser material is 306	
			F	Casing, impeller, dispenser material is 316L	
			M	Other materials	
				D	Direct transmission of motor
				V	Belt drive
				G	Reducer drive
				3	External water supply packing seal
				4	Internal water supply packing seal
				5	Single end face inside water supply mechanical seal
				6	Single end outside water supply mechanical seal
				7	Double face machine seal
					590 The pump speed

Material Selection Table

2BEX Pump Material Selection Table		
Name	General Configuration	Optional Materials
Impeller	QT400(2BEX101-505) Q235B(2BEX605-705)	304、316、316L,etc
Casing	Q235B	304、316、316L,etc
Distributor	HT200(2BEX101-253) Q235B(2BEX303-705)	304、316、316L,etc
Side Cover	HT200	304、316、316L,etc
Shaft	2Cr13(2BEX101-153) 45	304、316、316L,etc
Shaft Sleeve	304(2BEX101-153)	316、316L,etc

2BEX Series Water Ring Vacuum Pump Performance Curve

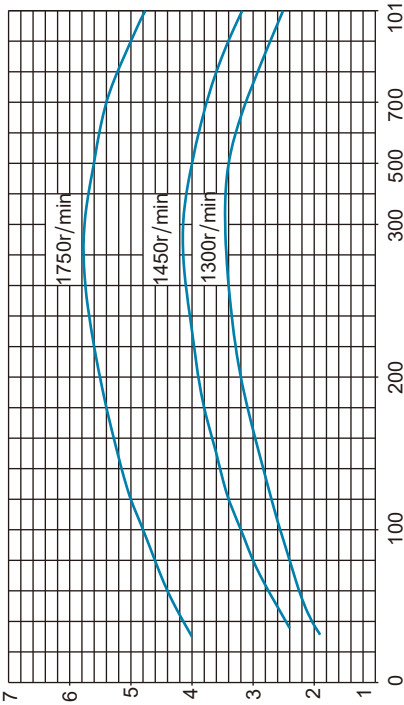
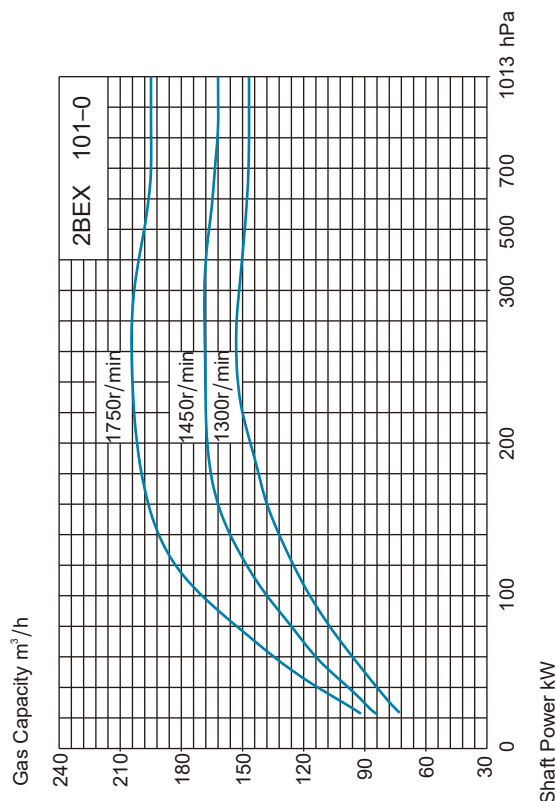
2BEX 102-0 Water Ring Vacuum Pump Performance Curve



Notice: The image above shows a suction temperature of 20°C, a working fluid temperature of 15°C, and an exhaust pressure of a standard atmospheric pressure (1013.25hPa), the performance curve of the pump when the medium is inhaled as saturated air.

Rotating Speed r/min	The amount of water supplied under different suction pressures m^3/h
1750	<200hPa 2.1 ~ 2.5 200 ~ 600hPa 1.2 ~ 2.1 >600hPa 0.5 ~ 1.2
1450	<200hPa 1.7 ~ 2.1 200 ~ 600hPa 1.0 ~ 1.7 >600hPa 0.4 ~ 1.0
1300	<200hPa 1.5 ~ 1.9 200 ~ 600hPa 0.9 ~ 1.5 >600hPa 0.4 ~ 0.9

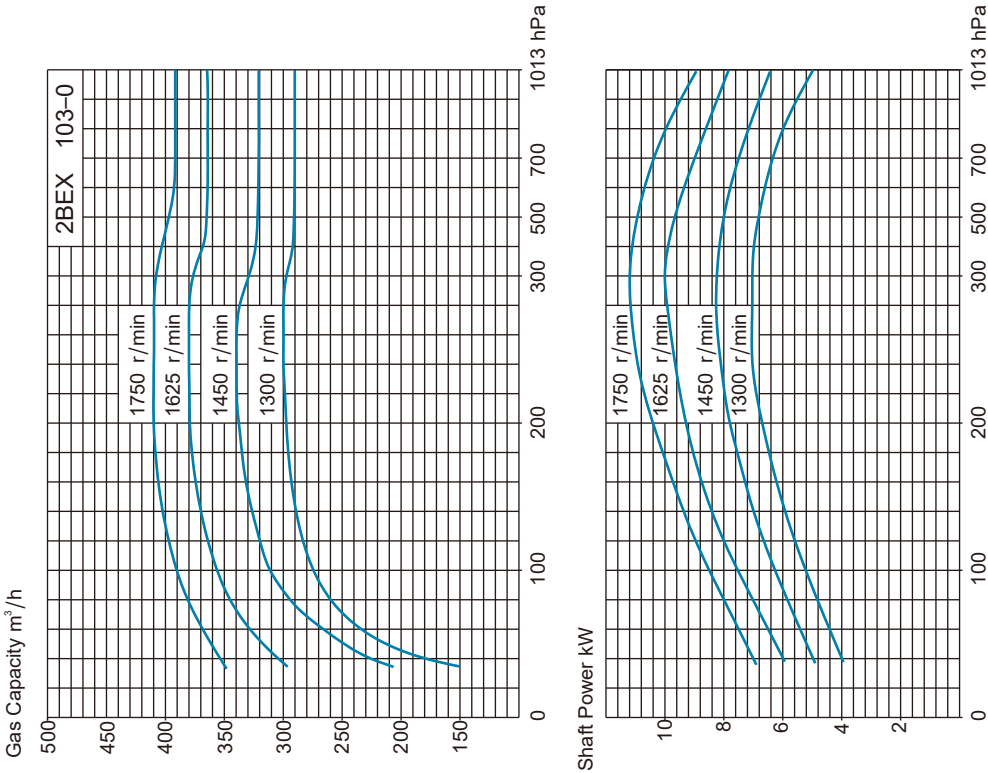
2BEX 101-0 Water Ring Vacuum Pump Performance Curve



Notice: The image above shows a suction temperature of 20°C, a working fluid temperature of 15°C, and an exhaust pressure of a standard atmospheric pressure (1013.25hPa), the performance curve of the pump when the medium is inhaled as saturated air.

Rotating Speed r/min	The amount of water supplied under different suction pressures m^3/h
1750	<200hPa 0.9 ~ 1.6 200 ~ 600hPa 0.6 ~ 1.2 >600hPa 0.4 ~ 0.8
1450	<200hPa 0.7 ~ 1.3 200 ~ 600hPa 0.5 ~ 1.0 >600hPa 0.3 ~ 0.6
1300	<200hPa 0.7 ~ 1.2 200 ~ 600hPa 0.5 ~ 0.9 >600hPa 0.3 ~ 0.6

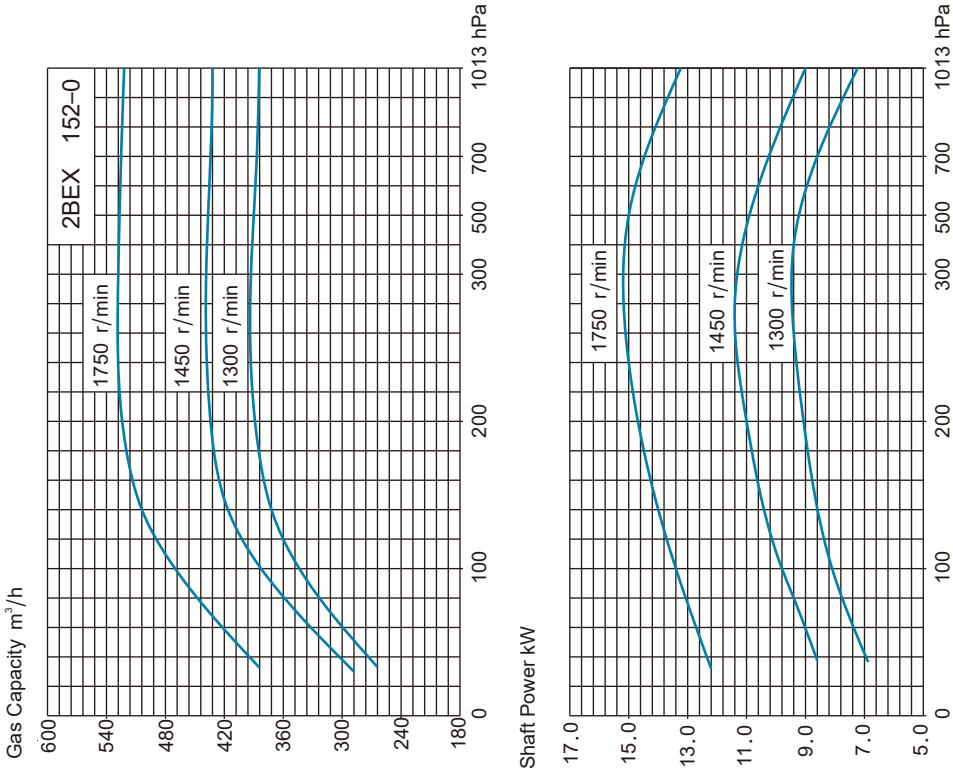
2BEX 103-0 Water Ring Vacuum Pump Performance Curve



Notice: The image above shows a suction temperature of 20℃, a working fluid temperature of 15℃, and an exhaust pressure of a standard atmospheric pressure (1013.25hPa), the performance curve of the pump when the medium is inhaled as saturated air.

Rotating Speed r/min	The amount of water supplied under different suction pressures m³/h		
	<200hPa	200 ~ 600hPa	>600hPa
1750	1.7 ~ 2.7	1.2 ~ 2.2	0.6 ~ 1.3
1625	1.6 ~ 2.5	1.1 ~ 2.0	0.6 ~ 1.2
1450	1.4 ~ 2.2	1.0 ~ 1.8	0.5 ~ 1.1
1300	1.3 ~ 2.0	0.8 ~ 1.7	0.4 ~ 1.0

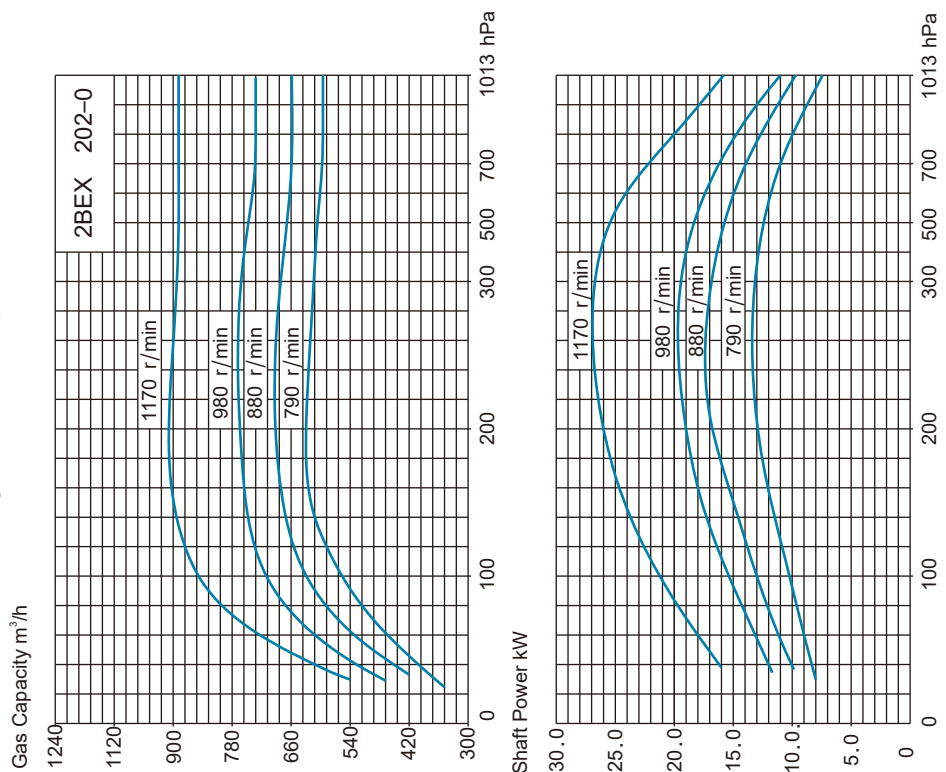
2BEX 152-0 Water Ring Vacuum Pump Performance Curve



Notice: The image above shows a suction temperature of 20℃, a working fluid temperature of 15℃, and an exhaust pressure of a standard atmospheric pressure (1013.25hPa), the performance curve of the pump when the medium is inhaled as saturated air.

Rotating Speed r/min	The amount of water supplied under different suction pressures m³/h		
	<200hPa	200 ~ 600hPa	>600hPa
1750	2.1 ~ 3.5	1.2 ~ 2.2	0.6 ~ 1.3
1450	1.7 ~ 2.9	1.0 ~ 1.8	0.5 ~ 1.1
1300	1.5 ~ 2.6	0.9 ~ 1.6	0.5 ~ 1.0

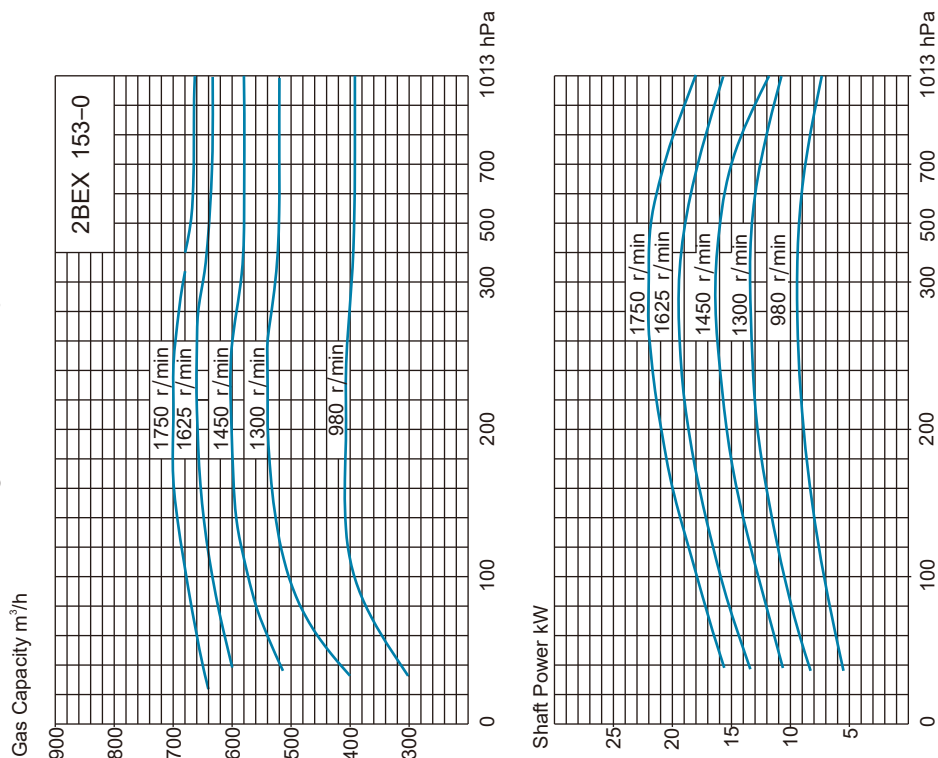
2BEX 202-0 Water Ring Vacuum Pump Performance Curve



Notice: The image above shows a suction temperature of 20℃, a working fluid temperature of 15℃, and an exhaust pressure of a standard atmospheric pressure (1013.25hPa), the performance curve of the pump when the medium is inhaled as saturated air.

Rotating Speed r/min	The amount of water supplied under different suction pressures m³/h		
	<200hPa	200 ~ 600hPa	>600hPa
1170	2.4 ~ 4.8	1.7 ~ 3.0	0.9 ~ 1.9
980	2.0 ~ 4.0	1.4 ~ 2.5	0.7 ~ 1.6
880	1.8 ~ 3.6	1.3 ~ 2.3	0.6 ~ 1.5
790	1.6 ~ 3.2	1.1 ~ 2.0	0.6 ~ 1.1

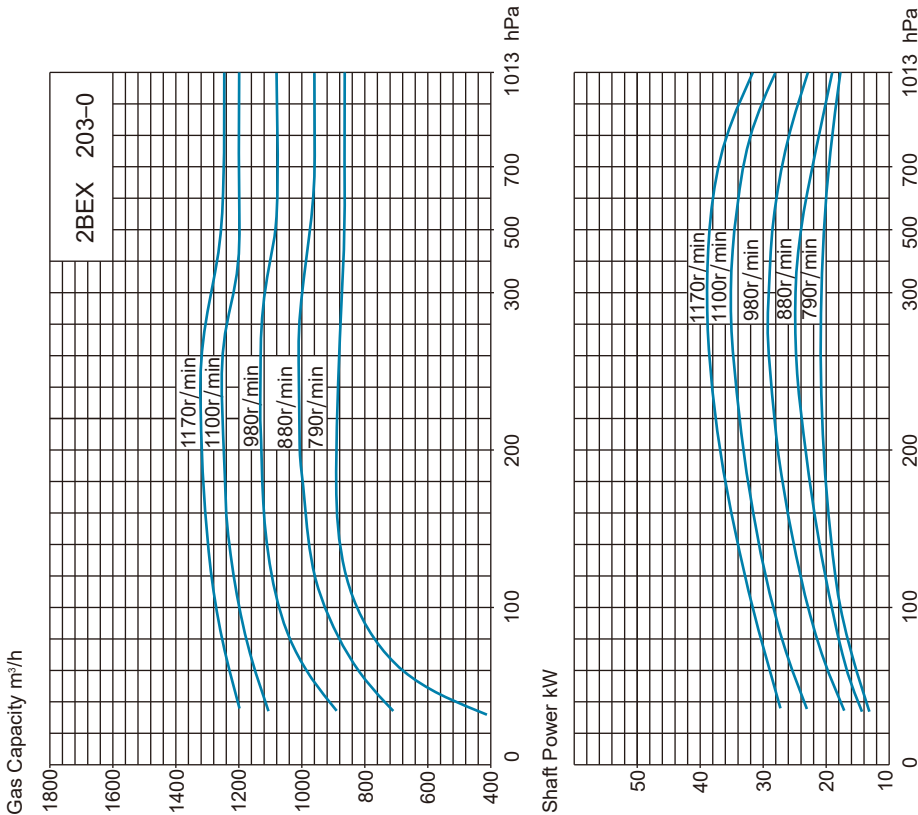
2BEX 153-0 Water Ring Vacuum Pump Performance Curve



Notice: The image above shows a suction temperature of 20℃, a working fluid temperature of 15℃, and an exhaust pressure of a standard atmospheric pressure (1013.25hPa), the performance curve of the pump when the medium is inhaled as saturated air.

Rotating Speed r/min	The amount of water supplied under different suction pressures m³/h		
	<200hPa	200 ~ 600hPa	>600hPa
1750	2.3 ~ 3.7	1.2 ~ 2.4	0.9 ~ 1.3
1625	2.1 ~ 3.6	1.1 ~ 2.2	0.8 ~ 1.2
1450	1.9 ~ 3.0	1.0 ~ 2.0	0.7 ~ 1.1
1300	1.7 ~ 2.7	0.9 ~ 1.8	0.7 ~ 1.0
980	1.3 ~ 2.2	0.7 ~ 1.4	0.6 ~ 0.8

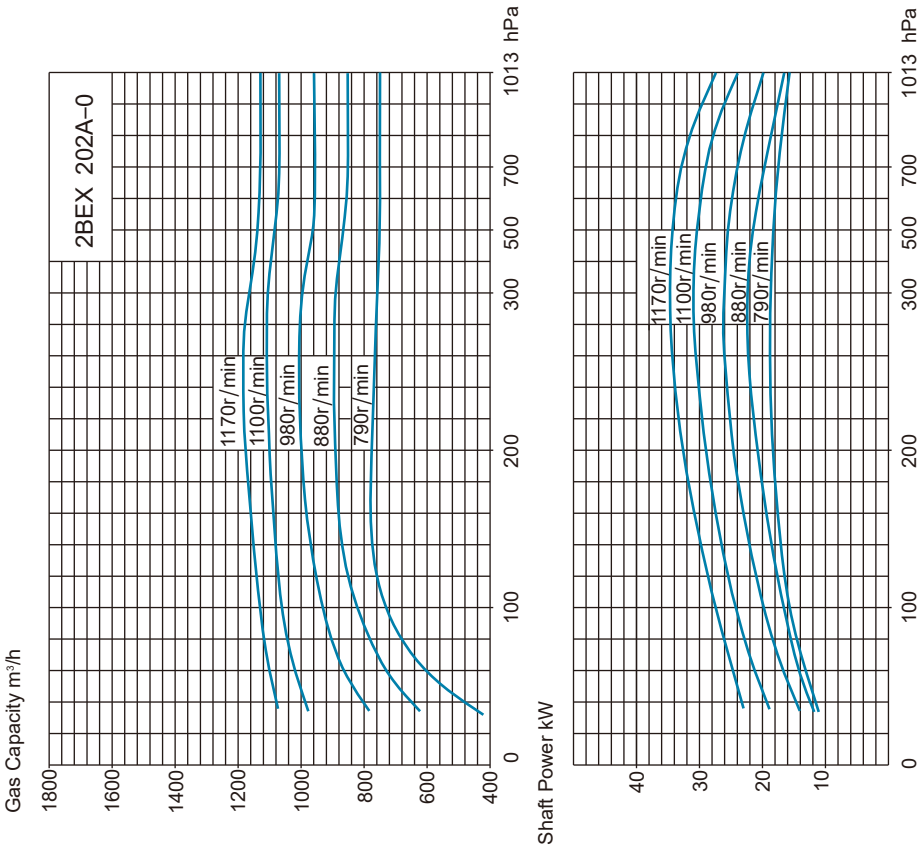
2BEX 203-0 Water Ring Vacuum Pump Performance Curve



Notice: The image above shows a suction temperature of 20℃, a working fluid temperature of 15℃, and an exhaust pressure of a standard atmospheric pressure (1013.25hPa), the performance curve of the pump when the medium is inhaled as saturated air.

Rotating Speed r/min	The amount of water supplied under different suction pressures m³/h		
	<200hPa	200 ~ 600hPa	>600hPa
1170	4.8 ~ 6.6	3.6 ~ 4.8	2.5 ~ 3.6
1100	4.5 ~ 6.2	3.4 ~ 4.5	2.4 ~ 3.4
980	4.0 ~ 5.5	3.0 ~ 4.0	2.0 ~ 3.0
880	3.6 ~ 5.0	2.7 ~ 3.6	1.8 ~ 2.7
790	3.3 ~ 4.5	2.5 ~ 3.3	1.7 ~ 2.5

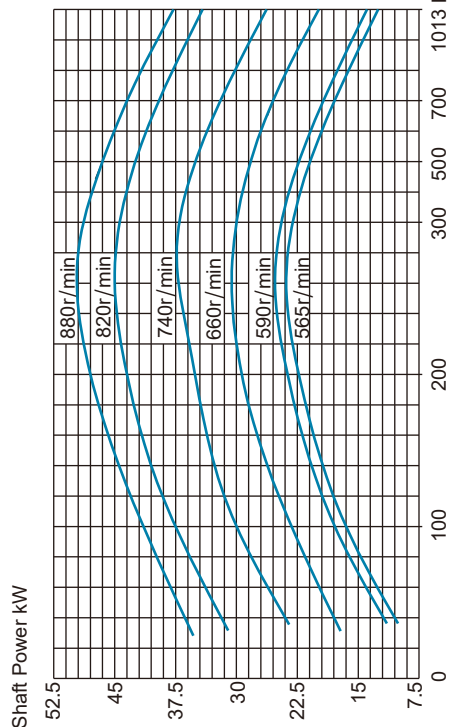
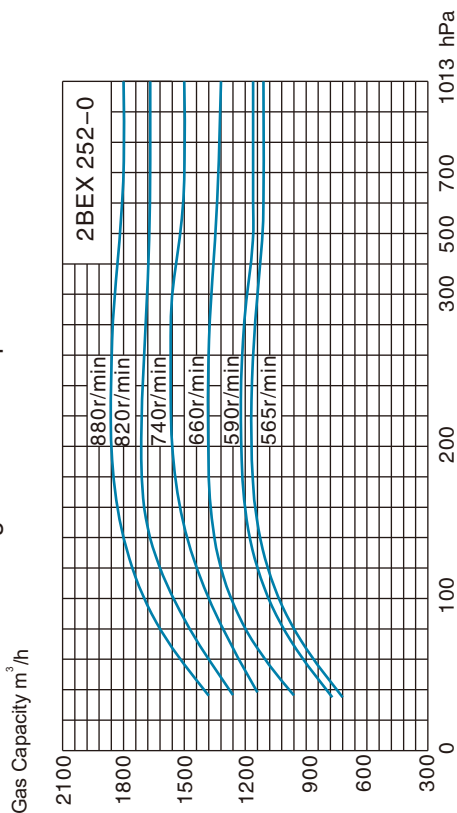
2BEX 202A-0 Water Ring Vacuum Pump Performance Curve



Notice: The image above shows a suction temperature of 20℃, a working fluid temperature of 15℃, and an exhaust pressure of a standard atmospheric pressure (1013.25hPa), the performance curve of the pump when the medium is inhaled as saturated air.

Rotating Speed r/min	The amount of water supplied under different suction pressures m³/h		
	<200hPa	200 ~ 600hPa	>600hPa
1170	4.3 ~ 5.9	3.2 ~ 4.3	2.2 ~ 3.2
1100	4.0 ~ 5.5	3.0 ~ 4.0	2.1 ~ 3.0
980	3.6 ~ 4.9	2.7 ~ 3.6	1.8 ~ 2.7
880	3.2 ~ 4.5	2.4 ~ 3.2	1.6 ~ 2.4
790	2.9 ~ 4.0	2.2 ~ 2.9	1.5 ~ 2.2

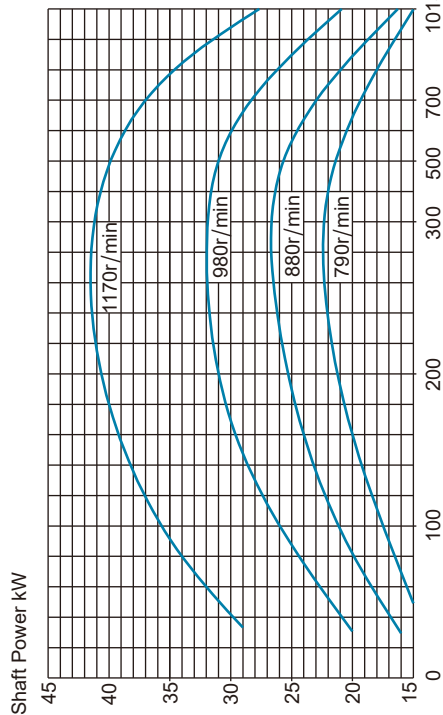
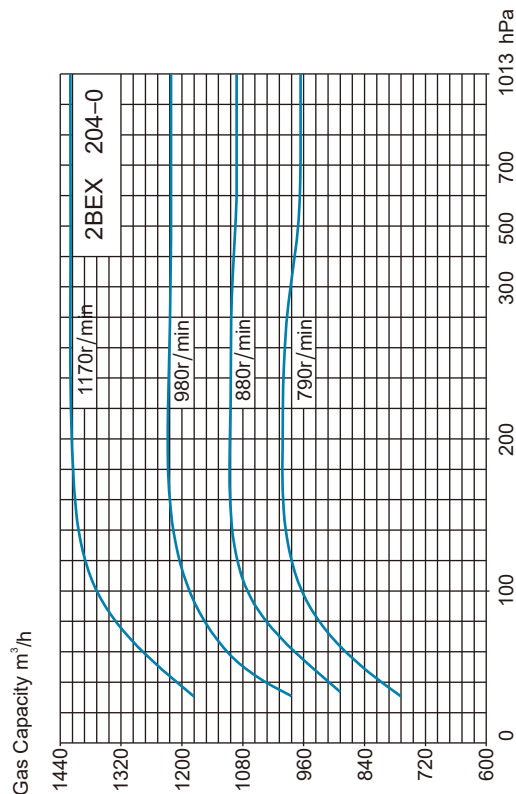
2BEX 252-0 Water Ring Vacuum Pump Performance Curve



Notice: The image above shows a suction temperature of 20°C, a working fluid temperature of 15°C, and an exhaust pressure of a standard atmospheric pressure (1013.25hPa), the performance curve of the pump when the medium is inhaled as saturated air.

Rotating Speed r/min	The amount of water supplied under different suction pressures m ³ /h		
	<200hPa	200 ~ 600hPa	>600hPa
880	4.4 ~ 7.1	3.0 ~ 4.4	1.7 ~ 3.0
820	4.1 ~ 6.6	2.8 ~ 4.1	1.6 ~ 2.8
740	3.7 ~ 6.0	2.5 ~ 3.7	1.4 ~ 2.5
660	3.3 ~ 5.4	2.2 ~ 3.3	1.2 ~ 2.2
590	3.0 ~ 4.8	2.2 ~ 3.0	1.3 ~ 2.2
565	2.8 ~ 4.6	1.9 ~ 2.8	1.1 ~ 1.9

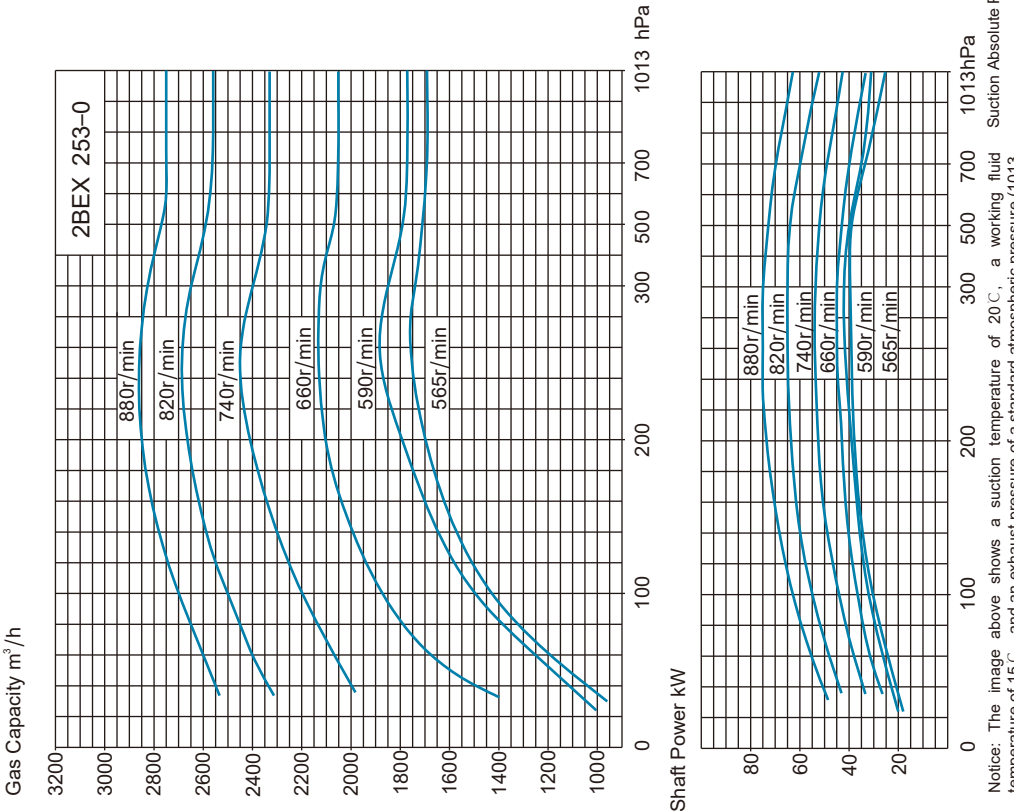
2BEX 204-0 Water Ring Vacuum Pump Performance Curve



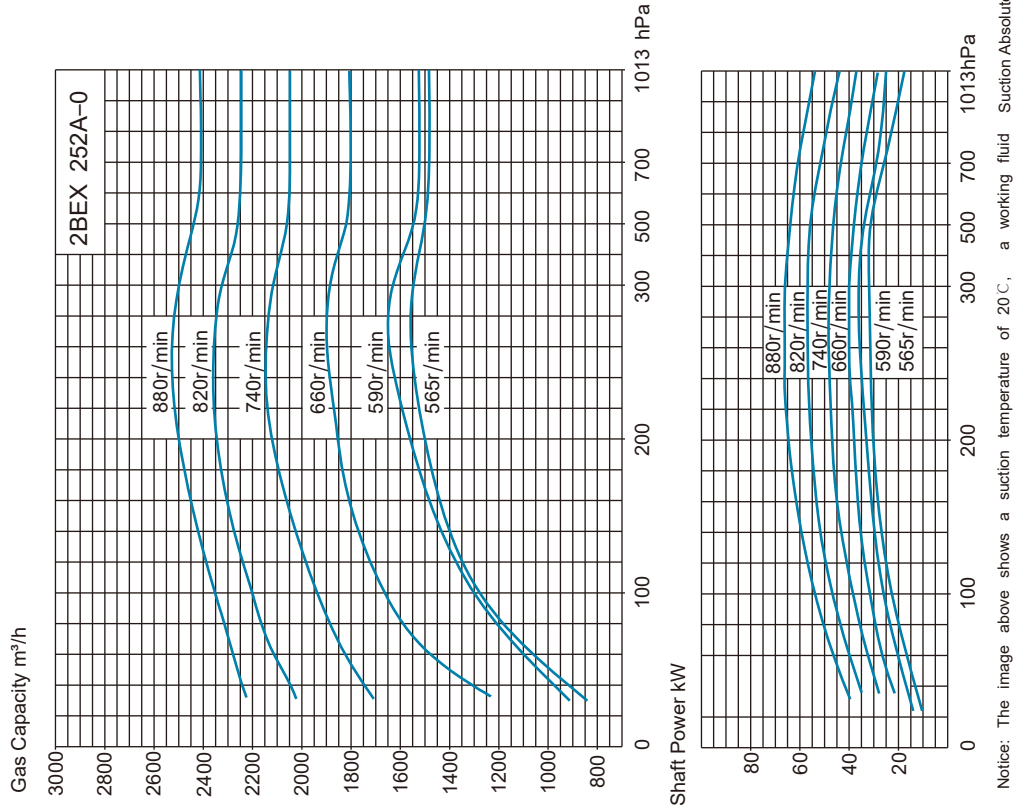
Notice: The image above shows a suction temperature of 20°C, a working fluid temperature of 15°C, and an exhaust pressure of a standard atmospheric pressure (1013.25hPa), the performance curve of the pump when the medium is inhaled as saturated air.

Rotating Speed r/min	The amount of water supplied under different suction pressures m ³ /h		
	<200hPa	200 ~ 600hPa	>600hPa
1170	3.6 ~ 7.2	2.5 ~ 4.3	1.2 ~ 2.9
980	3.0 ~ 6.0	2.1 ~ 3.6	1.0 ~ 2.4
880	2.7 ~ 5.4	1.9 ~ 3.2	0.9 ~ 2.2
790	2.4 ~ 4.8	1.7 ~ 2.9	0.8 ~ 2.0

2BEX 253-0 Water Ring Vacuum Pump Performance Curve



2BEX 252A-0 Water Ring Vacuum Pump Performance Curve



Notice: The image above shows a suction temperature of 20°C, a working fluid temperature of 15°C, and an exhaust pressure of a standard atmospheric pressure (1013.25hPa), the performance curve of the pump when the medium is inhaled as saturated air.

The amount of water supplied under different suction pressures m^3/h

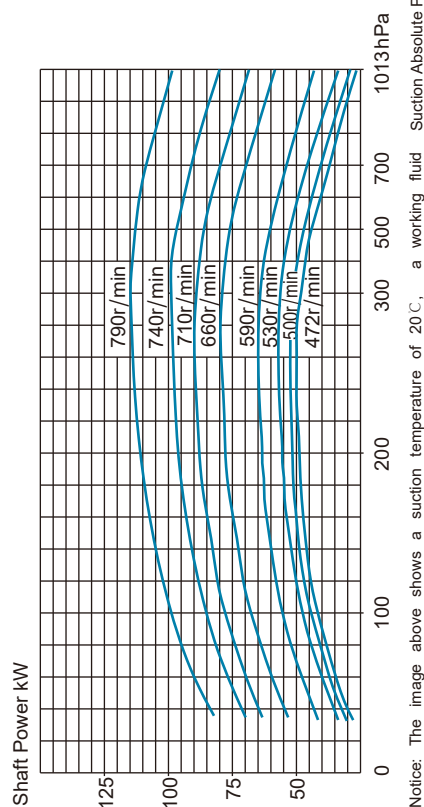
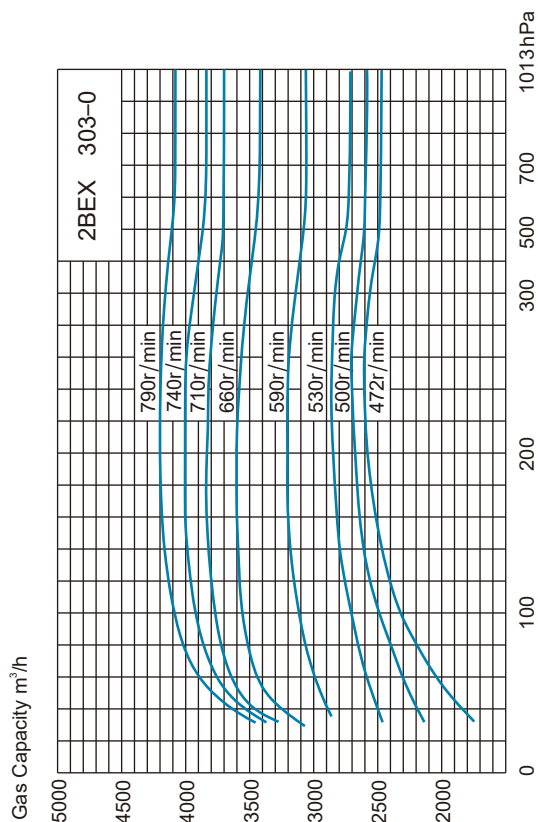
Rotating Speed r/min	<200hPa	200 ~ 600hPa	>600hPa
880	6.2 ~ 7.5	4.1 ~ 4.5	2.0 ~ 2.3
820	5.8 ~ 7.4	3.8 ~ 4.2	1.9 ~ 2.1
740	5.2 ~ 6.3	3.4 ~ 3.8	1.7 ~ 1.9
660	4.6 ~ 5.6	3.0 ~ 3.4	1.5 ~ 1.7
590	4.1 ~ 5.0	2.1 ~ 3.0	1.4 ~ 1.6
565	3.9 ~ 4.8	2.0 ~ 2.9	1.3 ~ 1.5

Notice: The image above shows a suction temperature of 20°C, a working fluid temperature of 15°C, and an exhaust pressure of a standard atmospheric pressure (1013.25hPa), the performance curve of the pump when the medium is inhaled as saturated air.

The amount of water supplied under different suction pressures m^3/h

Rotating Speed r/min	<200hPa	200 ~ 600hPa	>600hPa
880	5.5 ~ 6.6	3.6 ~ 4.0	1.8 ~ 2.0
820	5.1 ~ 6.5	3.3 ~ 3.7	1.7 ~ 1.9
740	4.6 ~ 5.5	3.0 ~ 3.3	1.5 ~ 1.7
660	4.1 ~ 4.9	2.6 ~ 3.0	1.3 ~ 1.5
590	3.6 ~ 4.4	1.9 ~ 2.6	1.3 ~ 1.4
565	3.4 ~ 4.2	1.8 ~ 2.6	1.1 ~ 1.3

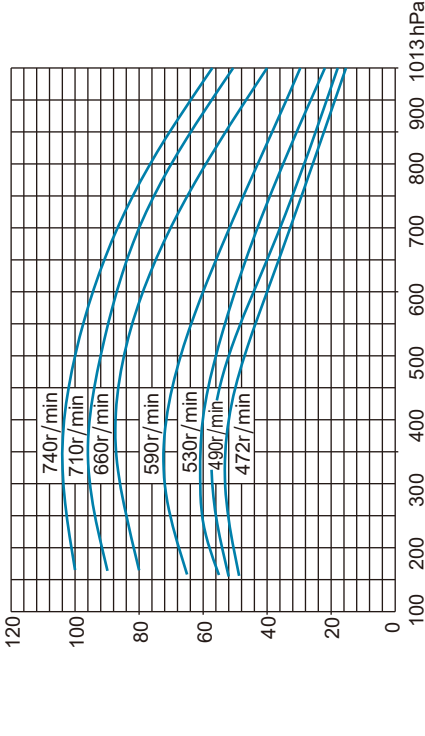
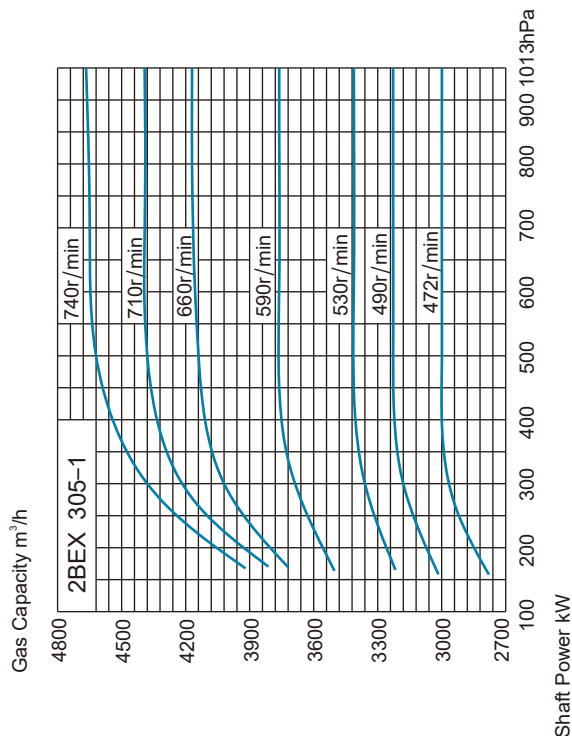
2BEX 303-0 Water Ring Vacuum Pump Performance Curve



Notice: The image above shows a suction temperature of 20°C, a working fluid temperature of 15°C, and an exhaust pressure of a standard atmospheric pressure (1013.25hPa), the performance curve of the pump when the medium is inhaled as saturated air.

Rotating Speed r/min	The amount of water supplied under different suction pressures m^3/h		
	<200hPa	200 ~ 600hPa	>600hPa
790	10.0 ~ 11.0	8.5 ~ 9.5	3.7 ~ 5.0
740	9.0 ~ 10.0	7.5 ~ 8.5	3.3 ~ 4.3
710	9.0 ~ 10.0	7.0 ~ 8.0	3.2 ~ 4.2
660	8.0 ~ 9.0	6.5 ~ 7.5	2.9 ~ 3.9
590	7.0 ~ 8.0	5.0 ~ 6.0	2.6 ~ 3.6
530	6.5 ~ 7.5	5.3 ~ 6.3	2.0 ~ 3.0
500	6.0 ~ 7.0	5.0 ~ 6.0	2.2 ~ 3.2
472	5.8 ~ 6.8	4.5 ~ 5.5	2.1 ~ 3.1

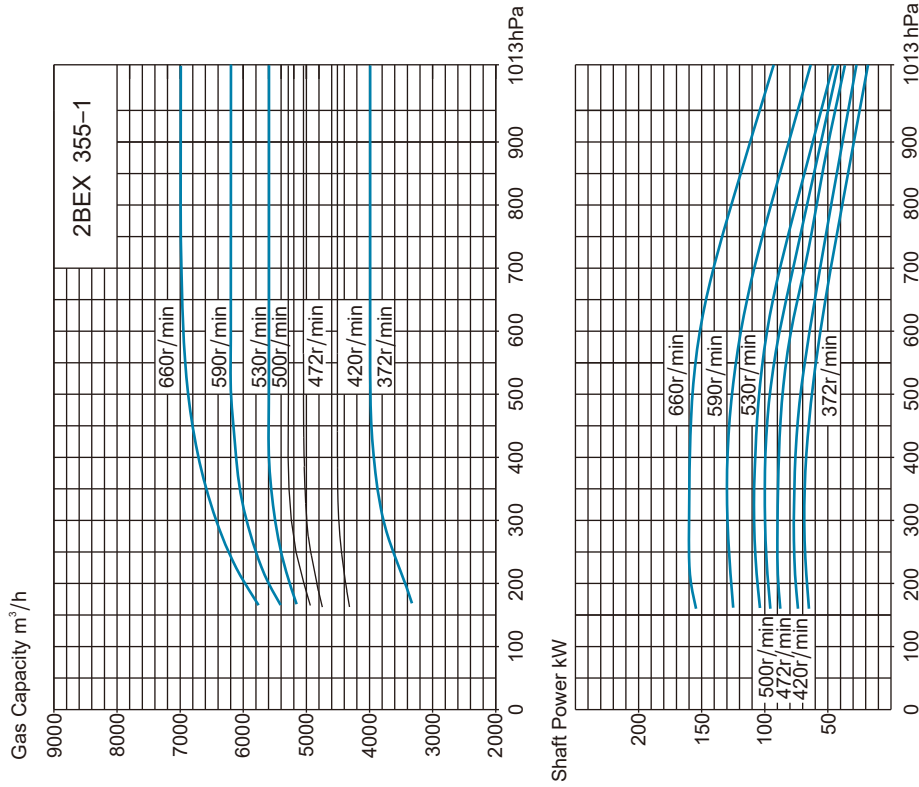
2BEX 305-1 Water Ring Vacuum Pump Performance Curve



Notice: The image above shows a suction temperature of 20°C, a working fluid temperature of 15°C, and an exhaust pressure of a standard atmospheric pressure (1013.25hPa), the performance curve of the pump when the medium is inhaled as saturated air.

Rotating Speed r/min	The amount of water supplied under different suction pressures m^3/h		
	<200hPa	200 ~ 400hPa	400 ~ 600hPa
740	8.8 ~ 9.2	7.8 ~ 8.8	5.7 ~ 7.8
710	8.5 ~ 8.8	7.5 ~ 8.5	5.5 ~ 7.5
660	7.9 ~ 8.3	7.0 ~ 7.9	5.1 ~ 7.0
590	7.2 ~ 7.5	6.2 ~ 7.2	4.5 ~ 6.2
530	6.4 ~ 6.7	5.0 ~ 6.0	2.6 ~ 3.6
490	6.5 ~ 7.5	5.6 ~ 6.4	4.1 ~ 5.4
472	5.8 ~ 6.0	5.0 ~ 6.0	3.6 ~ 5.0

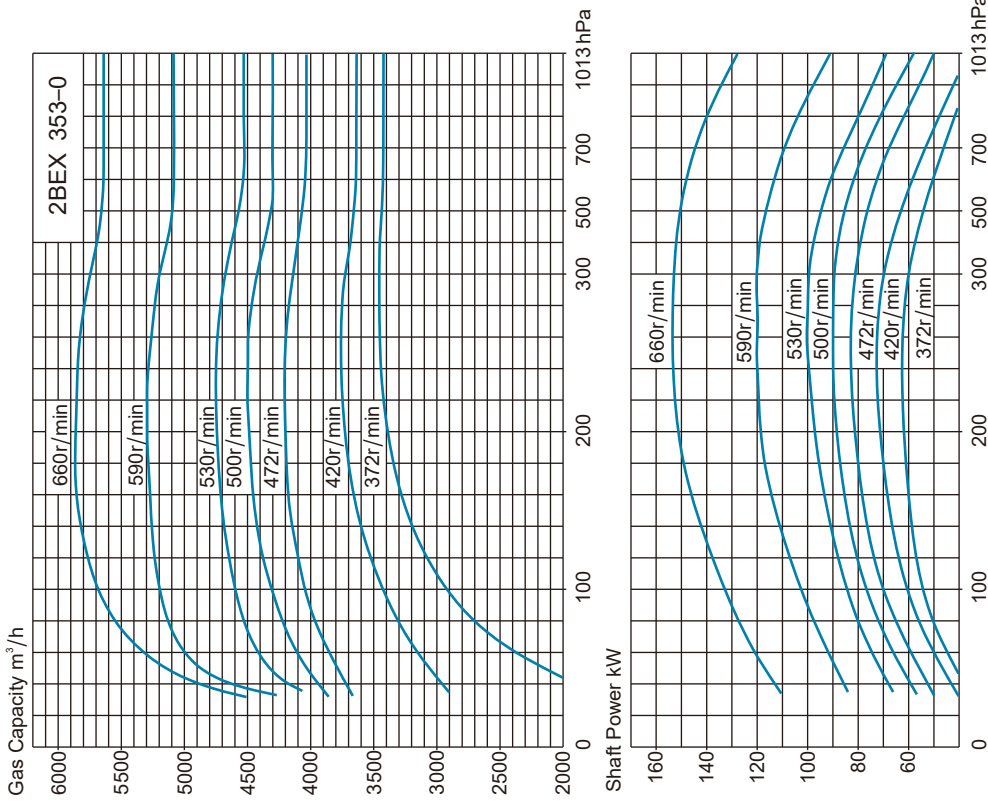
2BEX 355-1 Water Ring Vacuum Pump Performance Curve



Notice: The image above shows a suction temperature of 20°C , a working fluid temperature of 15°C , and an exhaust pressure of a standard atmospheric pressure (1013.25hPa), the performance curve of the pump when the medium is inhaled as saturated air.

Rotating Speed r/min	The amount of water supplied under different suction pressures m^3/h				
	<200hPa	200 ~ 400hPa	400 ~ 600hPa	>600hPa	
660	13.0 ~ 14.0	11.0 ~ 13.0	8.5 ~ 11.0	5.0 ~ 6.0	
590	11.5 ~ 12.5	9.0 ~ 11.5	7.5 ~ 9.0	4.5 ~ 5.5	
530	10.5 ~ 11.5	9.0 ~ 11.0	7.0 ~ 9.0	4.0 ~ 5.0	
500	10.3 ~ 11.3	8.7 ~ 10.7	6.7 ~ 8.7	3.7 ~ 4.7	
472	9.0 ~ 10.0	8.0 ~ 10.0	6.0 ~ 8.0	3.5 ~ 4.5	
420	8.0 ~ 9.0	7.0 ~ 9.0	5.0 ~ 7.0	3.0 ~ 4.0	
372	7.0 ~ 8.0	6.0 ~ 8.0	4.0 ~ 6.0	2.5 ~ 4.0	

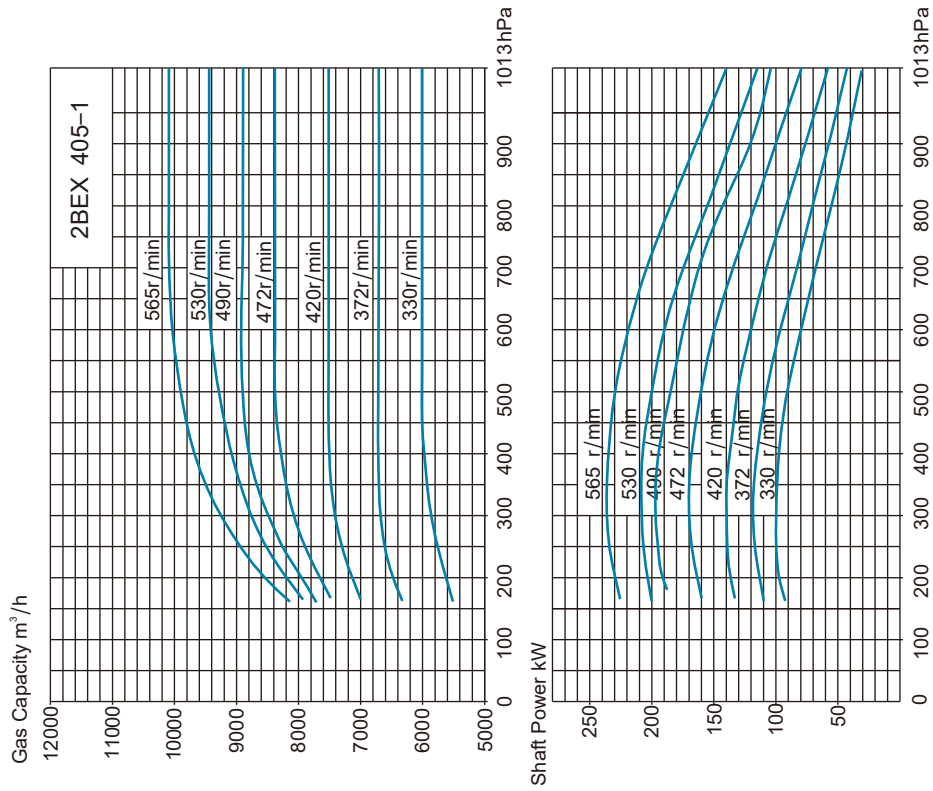
2BEX 353-0 Water Ring Vacuum Pump Performance Curve



Notice: The image above shows a suction temperature of 20°C , a working fluid temperature of 15°C , and an exhaust pressure of a standard atmospheric pressure (1013.25hPa), the performance curve of the pump when the medium is inhaled as saturated air.

Rotating Speed r/min	The amount of water supplied under different suction pressures m^3/h				
	<200hPa	200 ~ 400hPa	400 ~ 600hPa	>600hPa	
660	13.5 ~ 14.5	11.0 ~ 12.0	9.0 ~ 10.0	4.5 ~ 5.5	
590	12.0 ~ 13.0	9.5 ~ 10.5	8.5 ~ 9.5	4.0 ~ 5.0	
530	11.0 ~ 12.0	8.5 ~ 9.5	7.0 ~ 8.0	3.5 ~ 4.5	
500	10.7 ~ 11.7	8.0 ~ 9.3	6.6 ~ 7.6	3.2 ~ 4.2	
472	9.9 ~ 10.5	7.5 ~ 8.5	6.0 ~ 7.0	2.8 ~ 3.8	
420	8.5 ~ 9.5	6.5 ~ 7.5	5.5 ~ 6.5	2.5 ~ 3.8	
372	7.5 ~ 8.5	6.0 ~ 7.0	5.0 ~ 6.0	2.0 ~ 3.0	

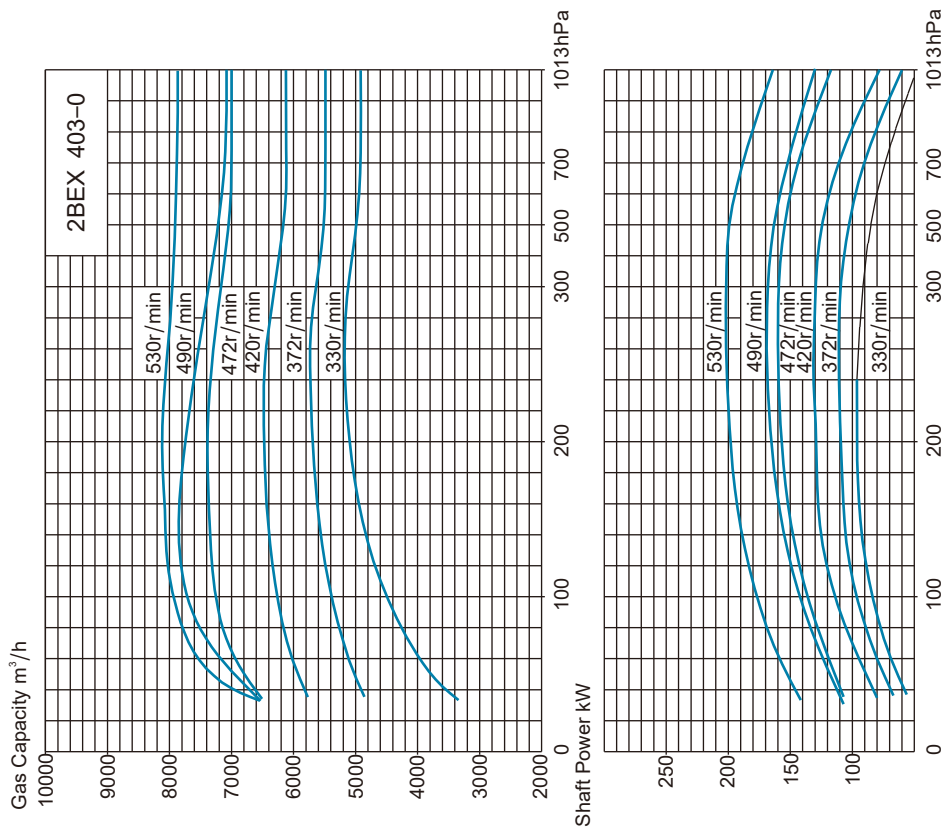
2BEX 405-1 Water Ring Vacuum Pump Performance Curve



Notice: The image above shows a suction temperature of 20 °C, a working fluid temperature of 15 °C, and an exhaust pressure of a standard atmospheric pressure (1013.25hPa), the performance curve of the pump when the medium is inhaled as saturated air.

Rotating Speed r/min	The amount of water supplied under different suction pressures m³/h		
	<200hPa	200 ~ 400hPa	400 ~ 600hPa
565	18.3 ~ 19.0	16.5 ~ 17.6	12.2 ~ 16.5
530	17.5 ~ 19.0	16.0 ~ 18.5	11.5 ~ 16.0
490	16.6 ~ 17.5	14.7 ~ 16.6	10.8 ~ 14.7
472	16.0 ~ 17.0	14.2 ~ 16.0	10.3 ~ 14.2
420	14.5 ~ 15.0	12.6 ~ 14.5	9.2 ~ 12.6
372	12.8 ~ 13.5	11.2 ~ 12.5	8.1 ~ 11.2
330	11.5 ~ 12.0	9.9 ~ 11.5	7.2 ~ 9.9

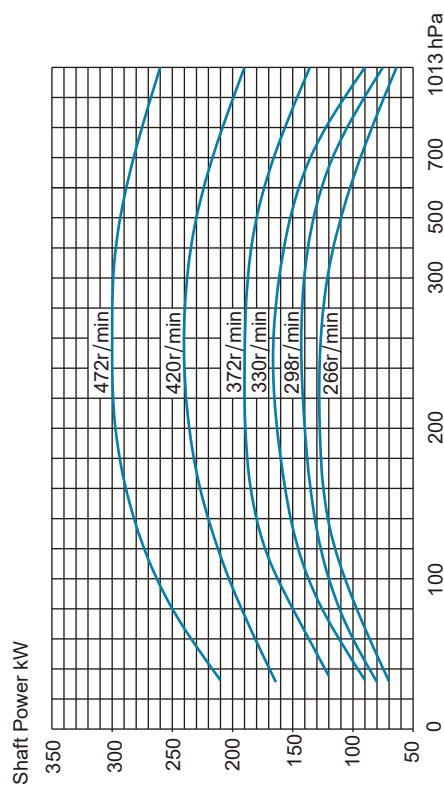
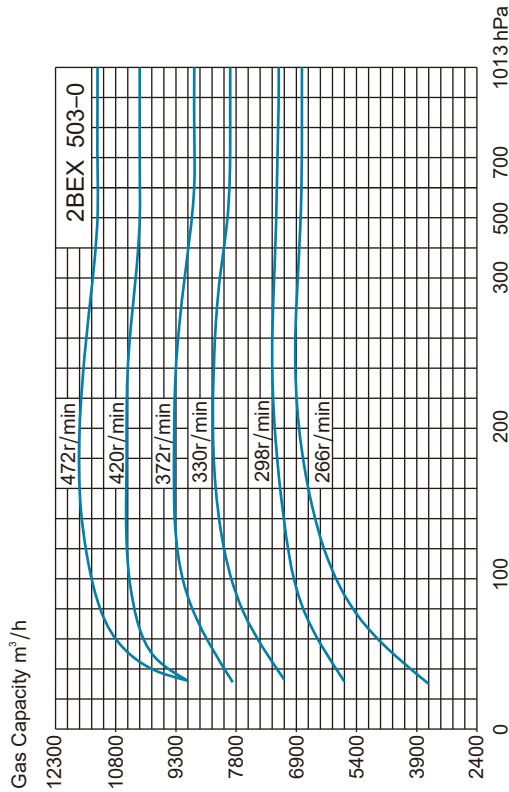
2BEX 403-0 Water Ring Vacuum Pump Performance Curve



Notice: The image above shows a suction temperature of 20 °C, a working fluid temperature of 15 °C, and an exhaust pressure of a standard atmospheric pressure (1013.25hPa), the performance curve of the pump when the medium is inhaled as saturated air.

Rotating Speed r/min	The amount of water supplied under different suction pressures m³/h		
	<200hPa	200 ~ 400hPa	400 ~ 600hPa
530	21.0 ~ 22.0	17.5 ~ 18.5	15.0 ~ 16.0
490	19.0 ~ 20.0	15.5 ~ 16.5	13.0 ~ 14.0
472	17.5 ~ 18.5	14.0 ~ 15.0	11.5 ~ 12.5
420	15.5 ~ 16.5	12.5 ~ 13.5	10.0 ~ 11.0
372	13.5 ~ 14.5	11.0 ~ 12.0	9.0 ~ 10.0
330	12.0 ~ 13.0	9.5 ~ 10.5	8.0 ~ 9.0

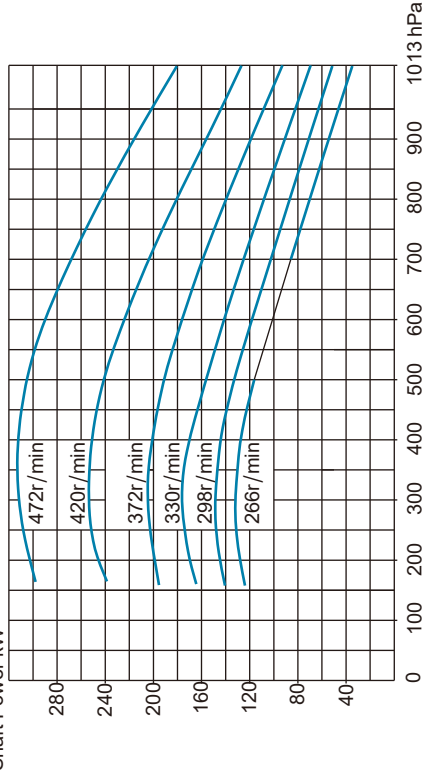
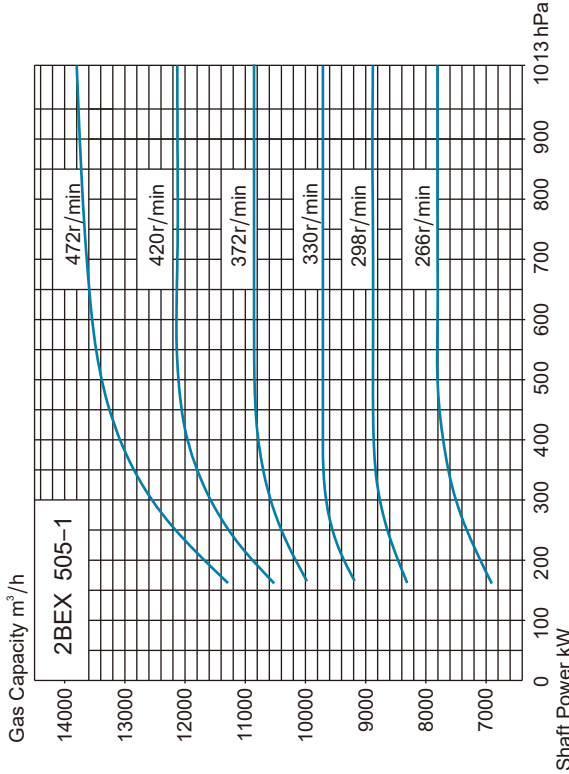
2BEX 503-0 Water Ring Vacuum Pump Performance Curve



Notice: The image above shows a suction temperature of 20°C, a working fluid temperature of 15°C, and an exhaust pressure of a standard atmospheric pressure (1013.25hPa), the performance curve of the pump when the medium is inhaled as saturated air.

Rotating Speed r/min	The amount of water supplied under different suction pressures m^3/h				
	<200hPa	200 ~ 400hPa	400 ~ 600hPa	>600hPa	
472	22.1 ~ 22.6	19.2 ~ 22.1	14.1 ~ 19.2	9.0 ~ 14.1	
420	19.6 ~ 20.1	17.1 ~ 19.6	12.5 ~ 17.1	7.9 ~ 12.5	
372	17.1 ~ 17.8	15.2 ~ 17.1	11.1 ~ 15.2	7.1 ~ 11.1	
330	15.4 ~ 15.8	13.4 ~ 15.4	9.9 ~ 13.4	5.9 ~ 9.9	
298	13.8 ~ 14.2	12.1 ~ 13.8	8.9 ~ 12.1	5.7 ~ 8.9	
266	12.4 ~ 12.8	10.9 ~ 12.4	7.9 ~ 10.9	5.1 ~ 7.9	

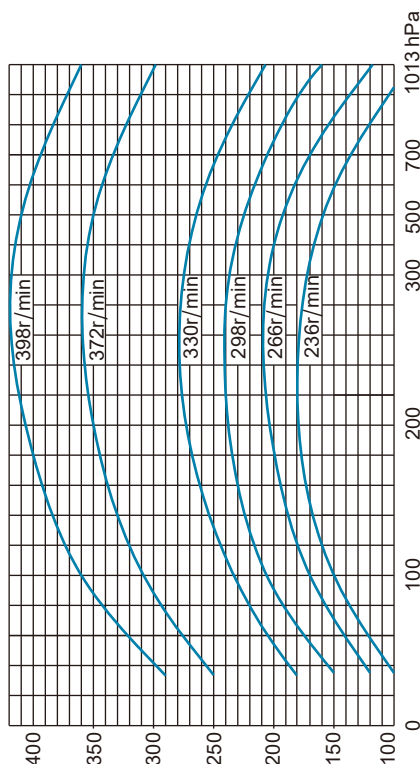
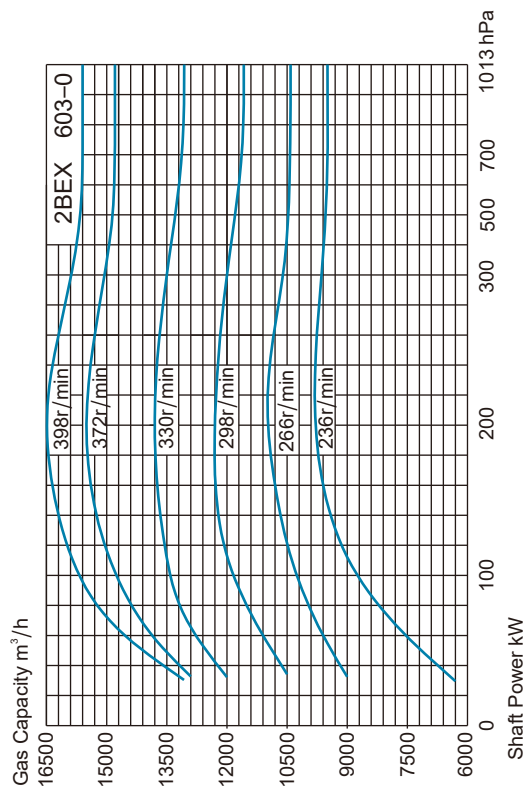
2BEX 505-1 Water Ring Vacuum Pump Performance Curve



Notice: The image above shows a suction temperature of 20°C, a working fluid temperature of 15°C, and an exhaust pressure of a standard atmospheric pressure (1013.25hPa), the performance curve of the pump when the medium is inhaled as saturated air.

Rotating Speed r/min	The amount of water supplied under different suction pressures m^3/h				
	<200hPa	200 ~ 400hPa	400 ~ 600hPa	>600hPa	
472	26.5 ~ 27.0	22.8 ~ 26.5	16.9 ~ 22.9	10.7 ~ 16.7	
420	23.5 ~ 24.1	20.5 ~ 23.5	15.0 ~ 20.5	9.6 ~ 15.0	
372	20.5 ~ 21.3	18.2 ~ 20.5	13.3 ~ 18.2	8.5 ~ 13.3	
330	18.5 ~ 18.9	16.1 ~ 18.5	11.8 ~ 16.1	7.5 ~ 11.8	
298	16.5 ~ 17.1	14.5 ~ 16.5	10.6 ~ 14.5	6.8 ~ 10.6	
266	14.5 ~ 15.3	13.0 ~ 14.9	9.5 ~ 13.0	6.1 ~ 9.5	

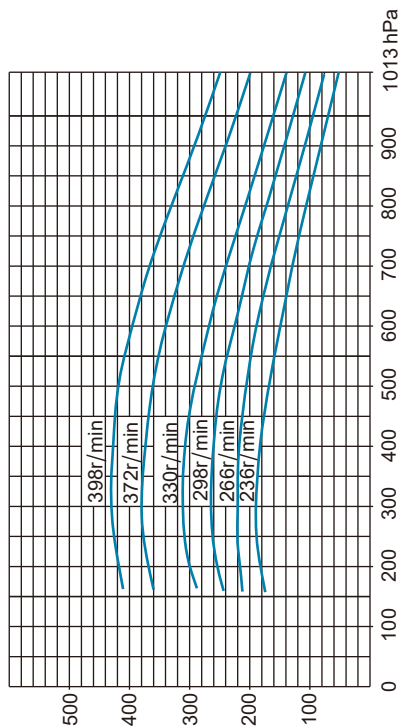
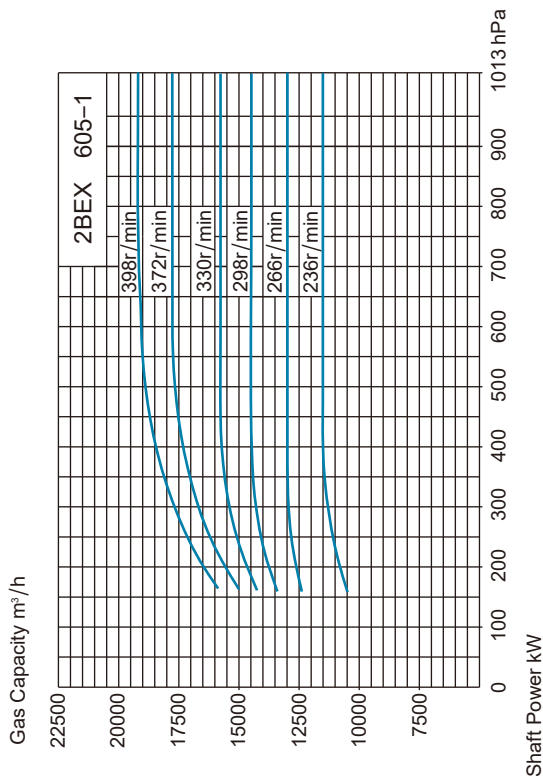
2BEX 603-0 Water Ring Vacuum Pump Performance Curve



Notice: The image above shows a suction temperature of 20°C , a working fluid temperature of 15°C , and an exhaust pressure of a standard atmospheric pressure (1013.25hPa), the performance curve of the pump when the medium is inhaled as saturated air.

Rotating Speed r/min	The amount of water supplied under different suction pressures m^3/h				
	<200hPa	200 ~ 400hPa	400 ~ 600hPa	>600hPa	
398	30.8 ~ 31.7	36.6 ~ 30.8	19.4 ~ 26.6	12.5 ~ 19.4	
372	28.7 ~ 29.6	24.9 ~ 28.7	18.1 ~ 24.9	11.7 ~ 18.1	
330	25.4 ~ 26.3	22 ~ 25.4	16.0 ~ 22.0	10.3 ~ 16.0	
298	22.9 ~ 23.7	19.9 ~ 22.5	14.0 ~ 19.9	9.4 ~ 17.5	
266	20.4 ~ 21.2	17.7 ~ 21.2	13.0 ~ 17.7	8.3 ~ 13.0	
236	17.9 ~ 18.7	15.8 ~ 17.9	11.5 ~ 15.8	7.4 ~ 11.5	

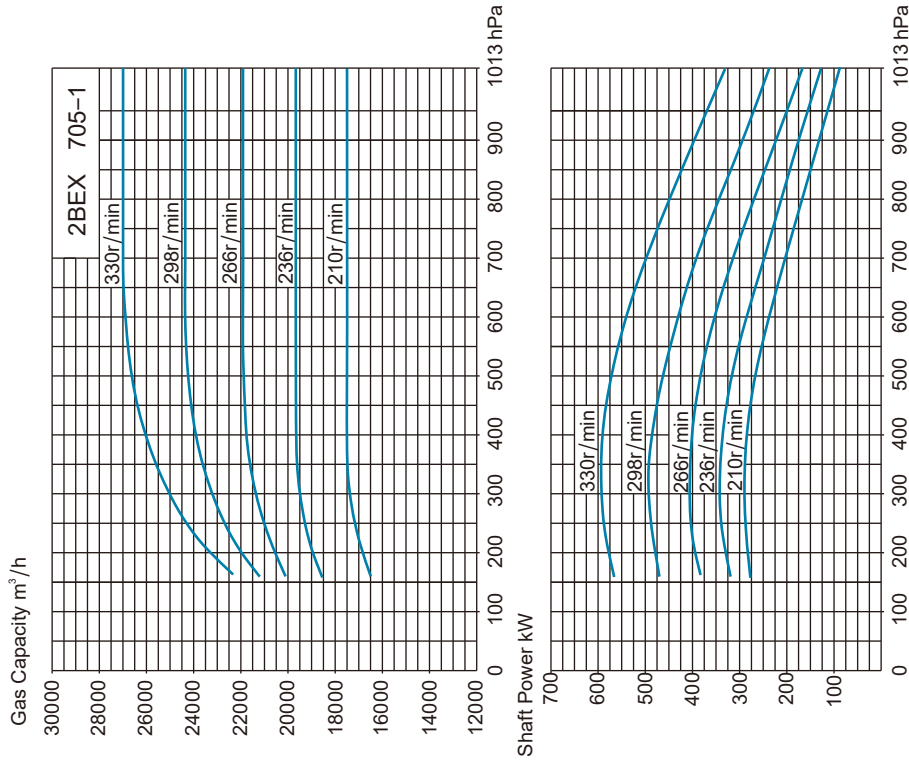
2BEX 605-1 Water Ring Vacuum Pump Performance Curve



Notice: The image above shows a suction temperature of 20°C , a working fluid temperature of 15°C , and an exhaust pressure of a standard atmospheric pressure (1013.25hPa), the performance curve of the pump when the medium is inhaled as saturated air.

Rotating Speed r/min	The amount of water supplied under different suction pressures m^3/h				
	<200hPa	200 ~ 400hPa	400 ~ 600hPa	>600hPa	
398	37.0 ~ 38.0	37.5 ~ 31.9	23.3 ~ 31.9	15.0 ~ 23.3	
372	34.5 ~ 35.5	29.8 ~ 35.0	21.8 ~ 29.8	14.0 ~ 21.8	
330	30.5 ~ 31.5	26.4 ~ 31.0	19.3 ~ 26.4	12.4 ~ 19.3	
298	27.5 ~ 28.5	23.9 ~ 27.5	17.5 ~ 23.9	11.2 ~ 17.5	
266	24.5 ~ 25.5	21.3 ~ 25.0	15.6 ~ 21.3	10.0 ~ 15.6	
236	21.5 ~ 22.5	18.9 ~ 22.2	13.8 ~ 18.9	8.9 ~ 13.8	

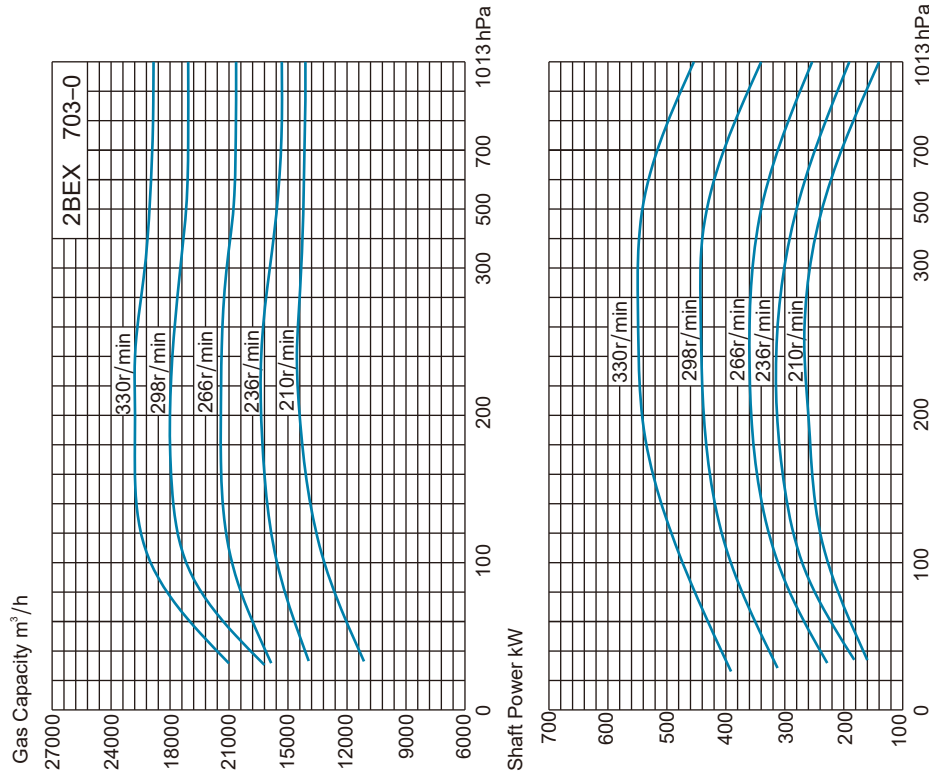
2BEX 705-1 Water Ring Vacuum Pump Performance Curve



Notice: The image above shows a suction temperature of 20℃, a working fluid temperature of 15℃, and an exhaust pressure of a standard atmospheric pressure (1013.25hPa), the performance curve of the pump when the medium is inhaled as saturated air.

Rotating Speed r/min	The amount of water supplied under different suction pressures m³/h			
	<200hPa	200 ~ 400hPa	400 ~ 600hPa	>600hPa
330	50.0 ~ 52.0	44.2 ~ 51.8	32.3 ~ 44.2	20.7 ~ 32.3
298	45.0 ~ 46.0	39.9 ~ 46.8	29.2 ~ 39.9	18.7 ~ 29.2
266	40.0 ~ 43.0	35.6 ~ 41.8	26.1 ~ 35.6	16.7 ~ 26.1
236	36.0 ~ 38.0	31.6 ~ 37.1	23.1 ~ 31.6	14.8 ~ 23.1
210	32.0 ~ 34.0	28.1 ~ 33.0	20.6 ~ 28.1	13.2 ~ 20.6

2BEX 703-0 Water Ring Vacuum Pump Performance Curve



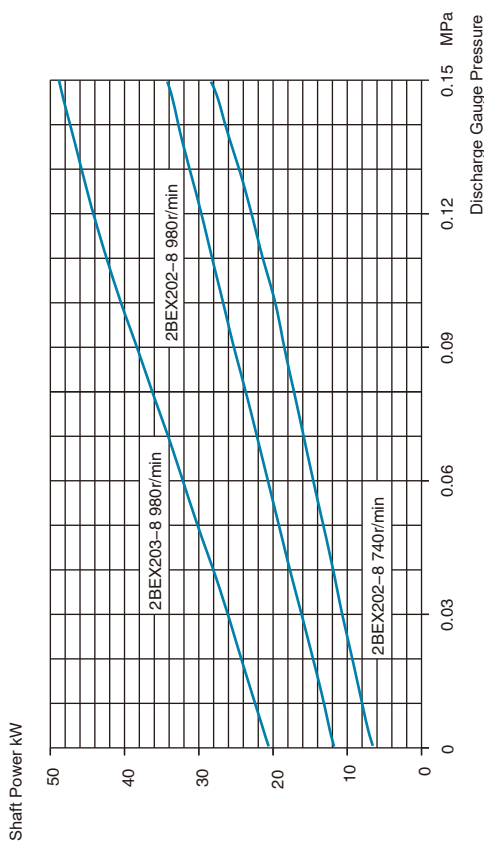
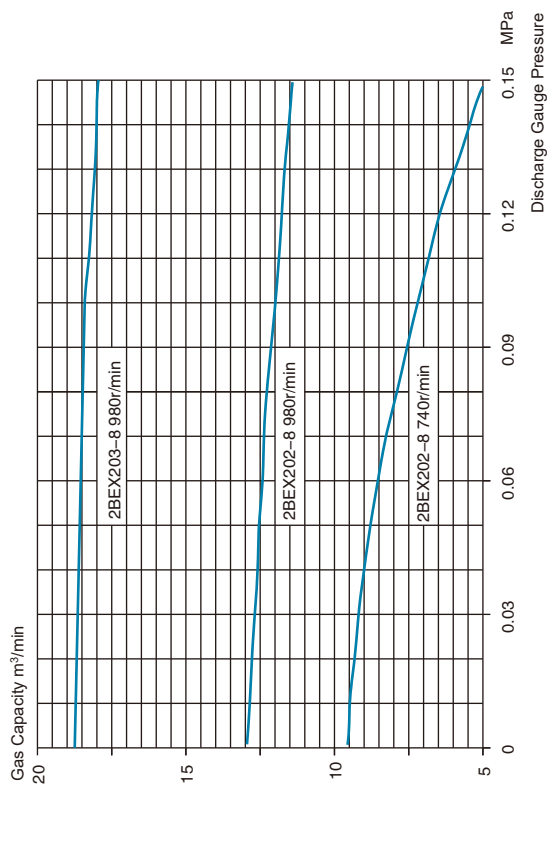
Notice: The image above shows a suction temperature of 20℃, a working fluid temperature of 15℃, and an exhaust pressure of a standard atmospheric pressure (1013.25hPa), the performance curve of the pump when the medium is inhaled as saturated air.

Rotating Speed r/min	The amount of water supplied under different suction pressures m³/h			
	<200hPa	200 ~ 400hPa	400 ~ 600hPa	>600hPa
330	41.2 ~ 42.8	36.4 ~ 42.7	26.6 ~ 36.4	17.1 ~ 26.6
298	37.1 ~ 37.9	37.1 ~ 38.5	24.1 ~ 32.9	15.4 ~ 24.1
266	33.0 ~ 35.4	29.3 ~ 34.4	21.5 ~ 29.3	13.7 ~ 21.5
236	29.7 ~ 31.3	26.0 ~ 30.6	19.1 ~ 26.0	12.2 ~ 19.1
210	26.4 ~ 28.0	23.2 ~ 27.2	17.0 ~ 23.2	10.9 ~ 17.0

2BEX Series Water Ring Compressor Performance Curve

2BEX101/102/103/152/153/202/203-8 Water Ring Compressor Performance Curve

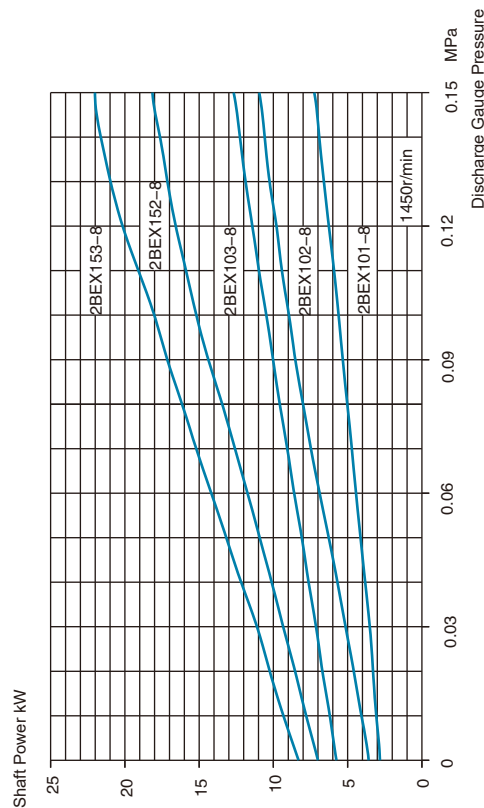
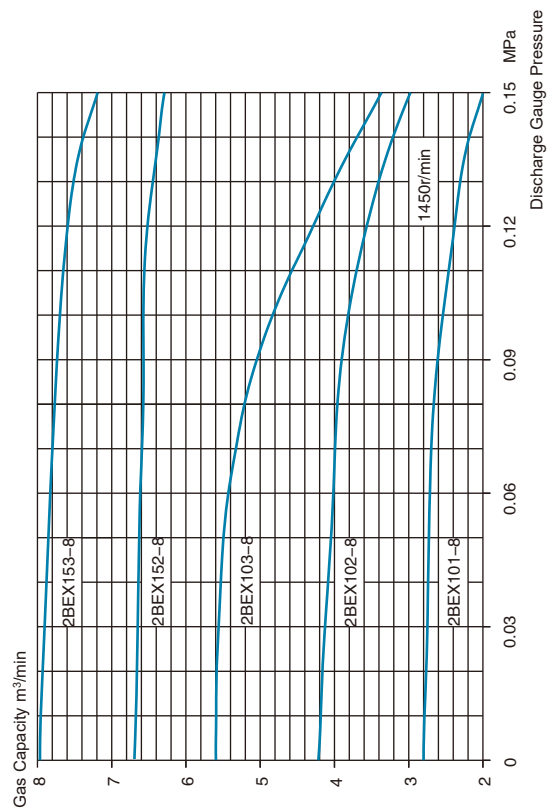
2BEX 202-8——2BEX 203-8 Water Ring Compressor Suction, Shaft Power Curve



Pump Model	Rotating Speed	Water Supplied Amount
2BEX202-8	740	3.8-4.5
2BEX203-8	980	2.2-5.5

1. This curve is based on the air infested temperature of 20°C, the infested water temperature of 15°C, inhalation pressure for a standard atmospheric pressure of 1013 hpa (absolute pressure) under the conditions obtained performance curve;
2. Performance tolerance $\pm 5\%$.

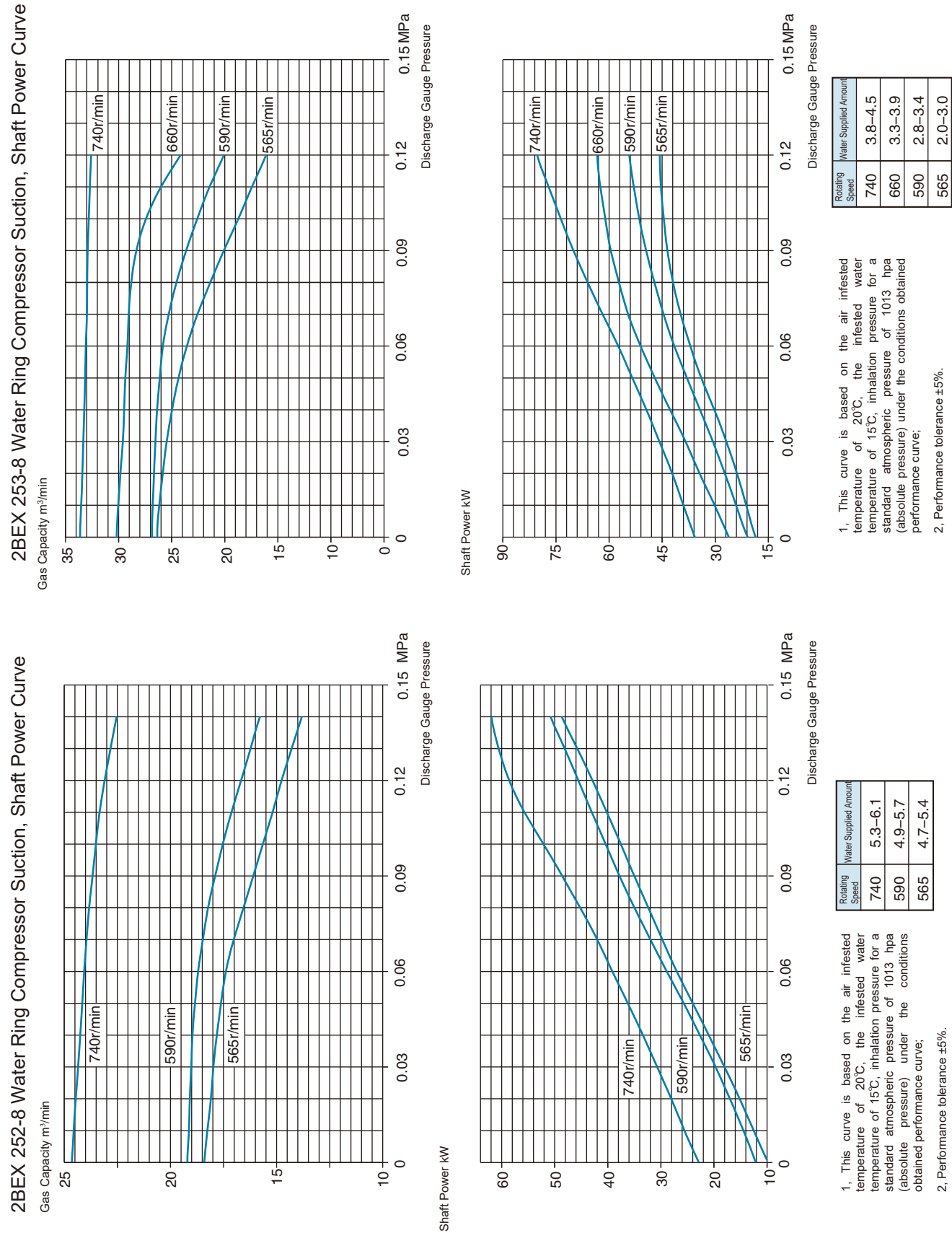
2BEX 101-8——2BEX153-8 Water Ring Compressor Suction, Shaft Power Curve



Pump Model	Rotating Speed	Water Supplied Amount
2BEX101-8	1450	1.4-2.0
2BEX102-8		2.1-2.8
2BEX103-8		2.2-3.3
2BEX152-8		2.9-3.5
2BEX153-8		3.0-3.8

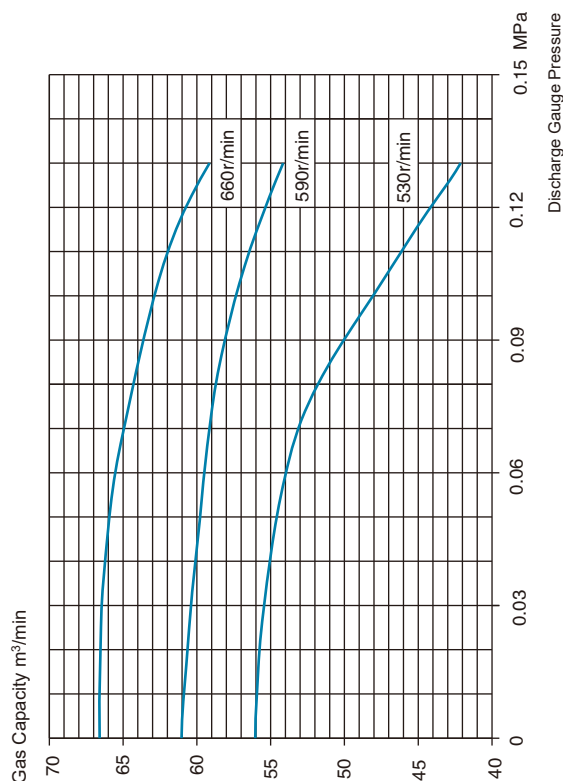
1. This curve is based on the air infested temperature of 20°C, the infested water temperature of 15°C, inhalation pressure for a standard atmospheric pressure of 1013 hpa (absolute pressure) under the conditions obtained performance curve;
2. Performance tolerance $\pm 5\%$.

2BEX 252/253-8 Water Ring Compressor Performance Curve

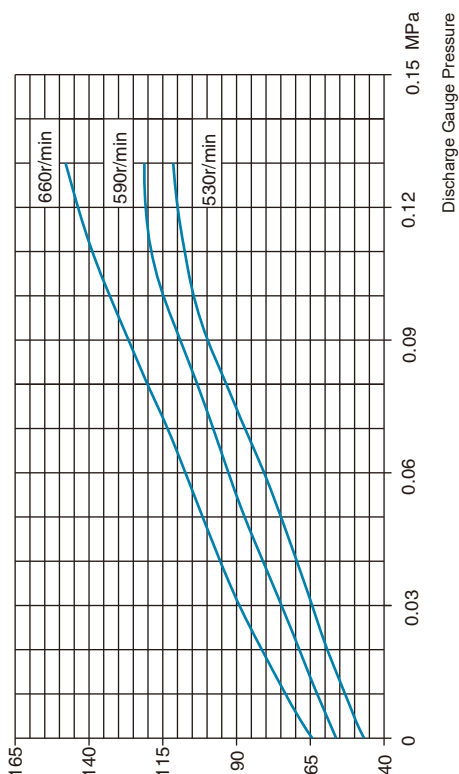


2BEX 303/305-8 Water Ring Compressor Performance Curve

2BEX 305-8 Water Ring Compressor Suction, Shaft Power Curve



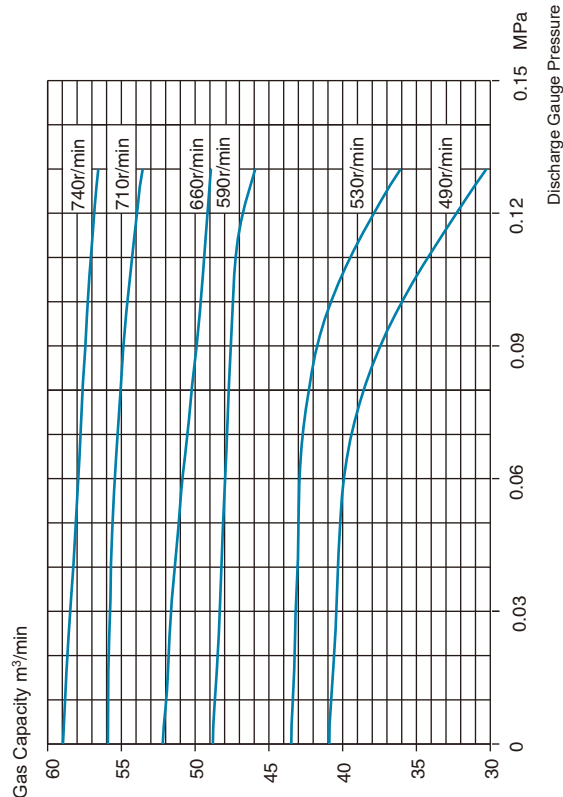
Shaft Power kW



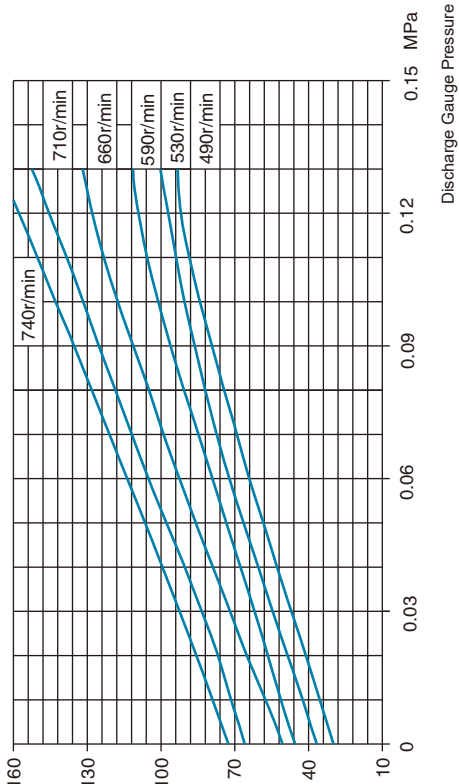
Rotating Speed	Water Supplied Amount
660	8.9-10.4
590	8.2-9.3
530	7.3-8.1

1. This curve is based on the air infested temperature of 20°C, the infested water standard atmospheric pressure of 1013 hpa (absolute pressure) under the conditions obtained performance curve;
2. Performance tolerance ±5%.

2BEX 303-8 Water Ring Compressor Suction, Shaft Power Curve



Shaft Power kW

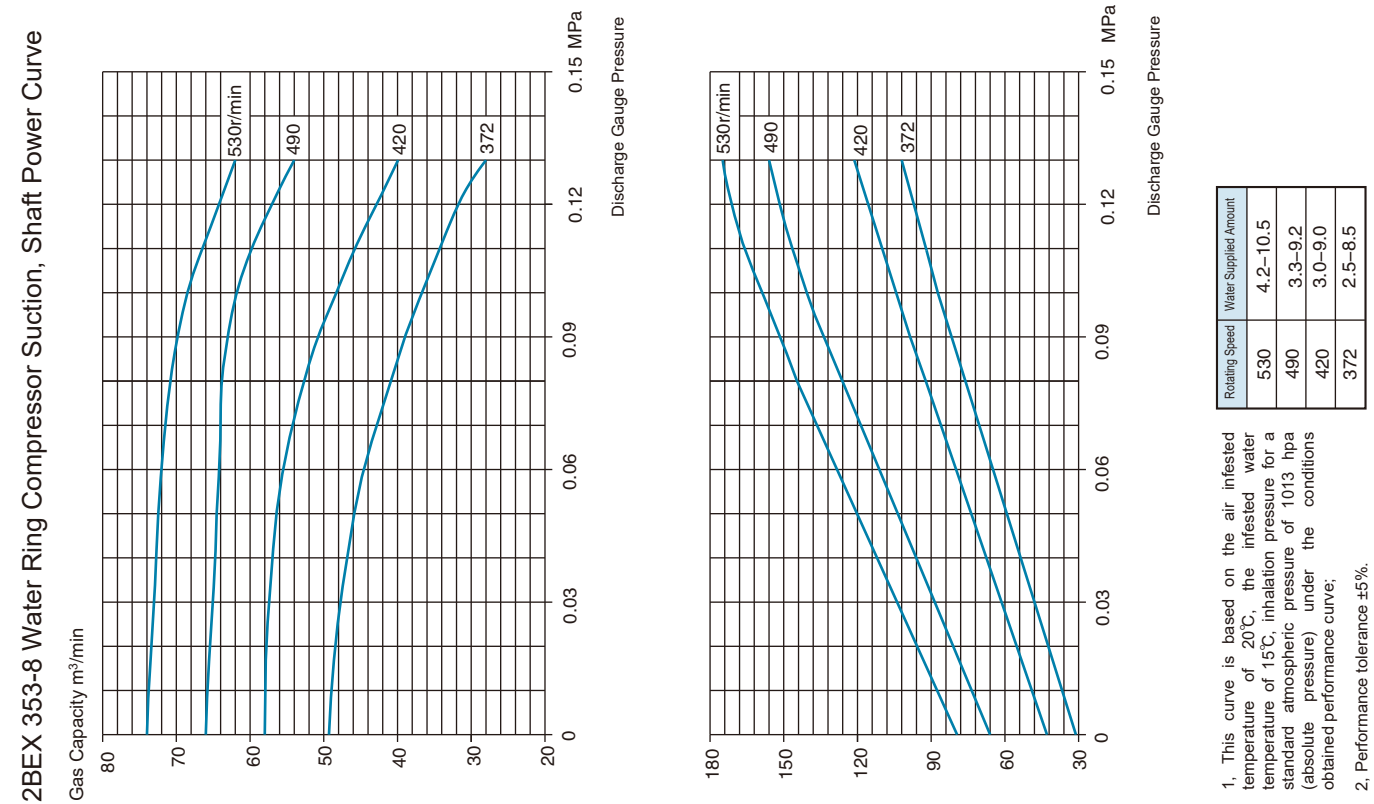
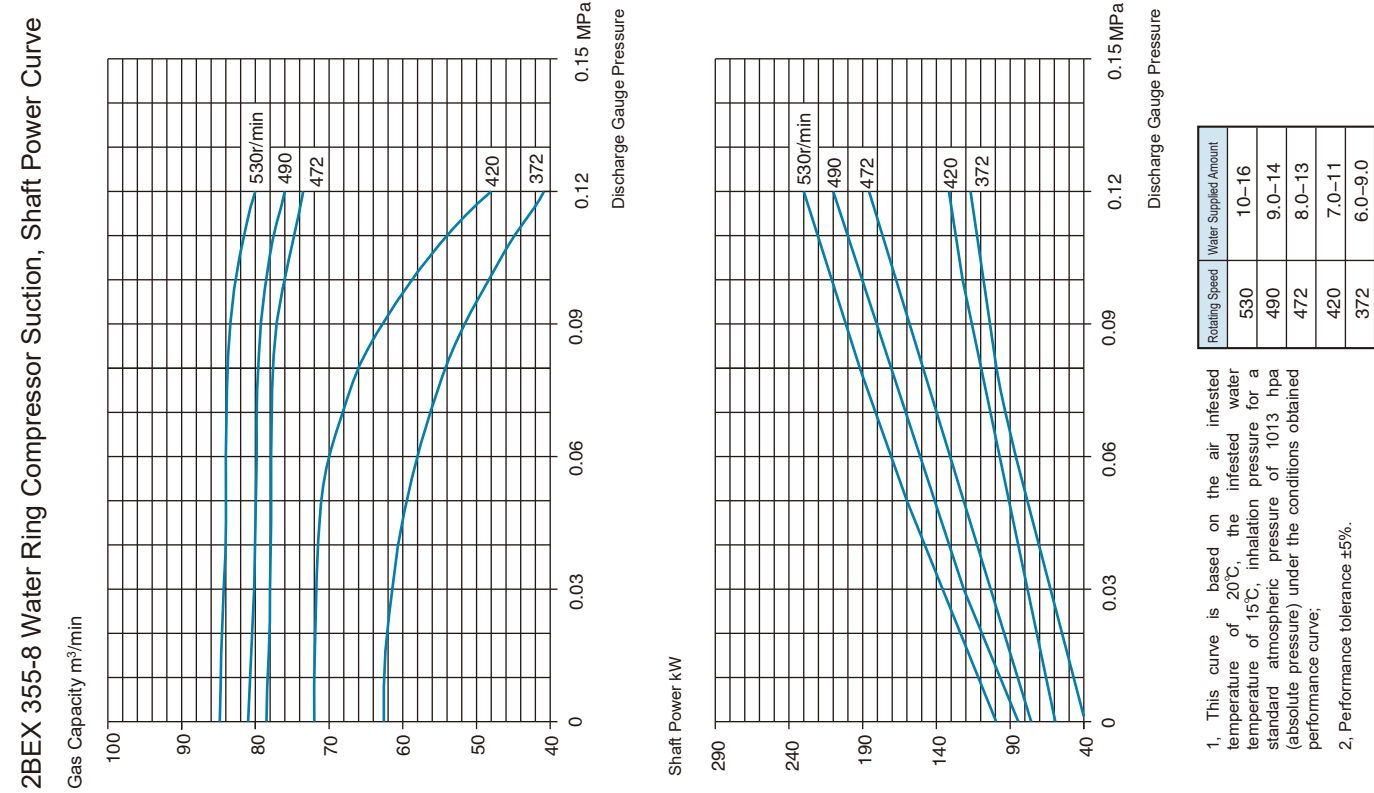


Rotating Speed	Water Supplied Amount
590	8.1-9.0
530	6.7-7.5
490	6.1-6.9

Rotating Speed	Water Supplied Amount
740	9.7-12.2
710	9.3-11.7
660	8.5-10.9

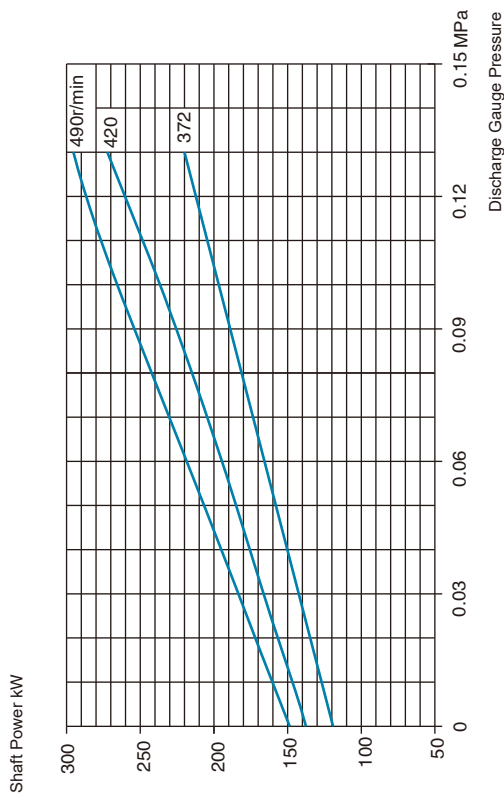
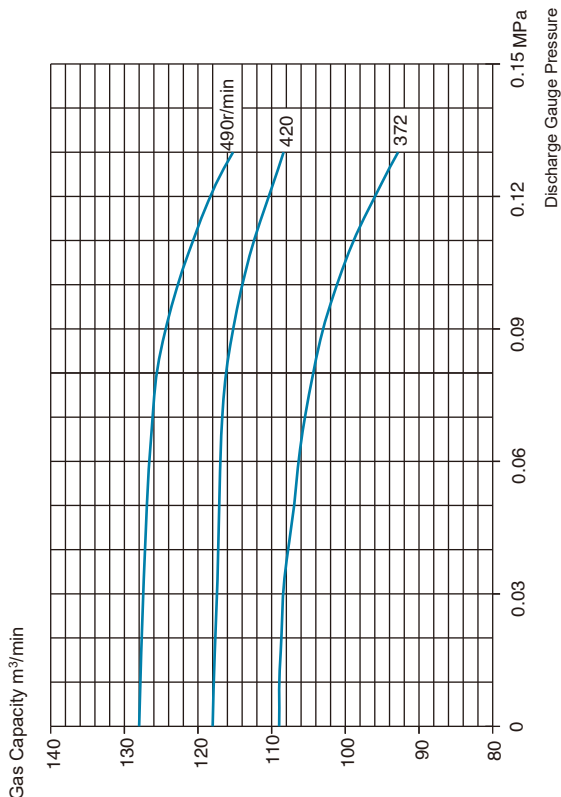
1. This curve is based on the air infested temperature of 20°C, the infested water standard atmospheric pressure of 1013 hpa (absolute pressure) under the conditions obtained performance curve;
2. Performance tolerance ±5%.

2BEX 353/355-8 Water Ring Compressor Performance Curve



2BEX 403/405-8 Water Ring Compressor Performance Curve

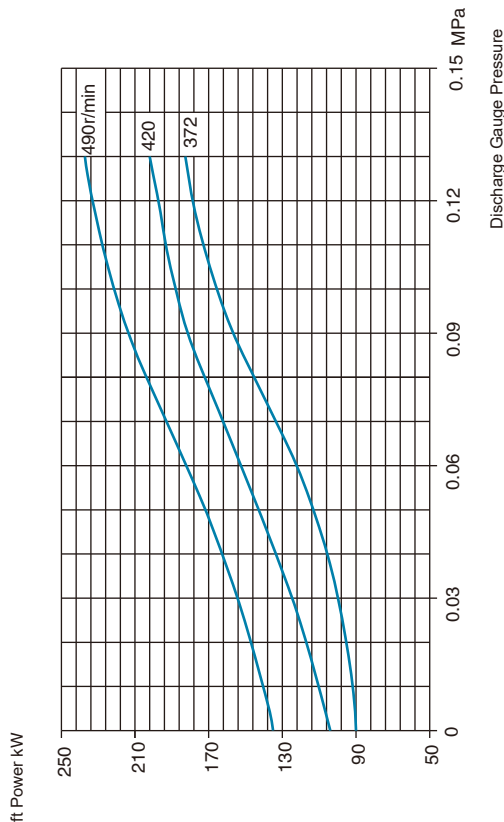
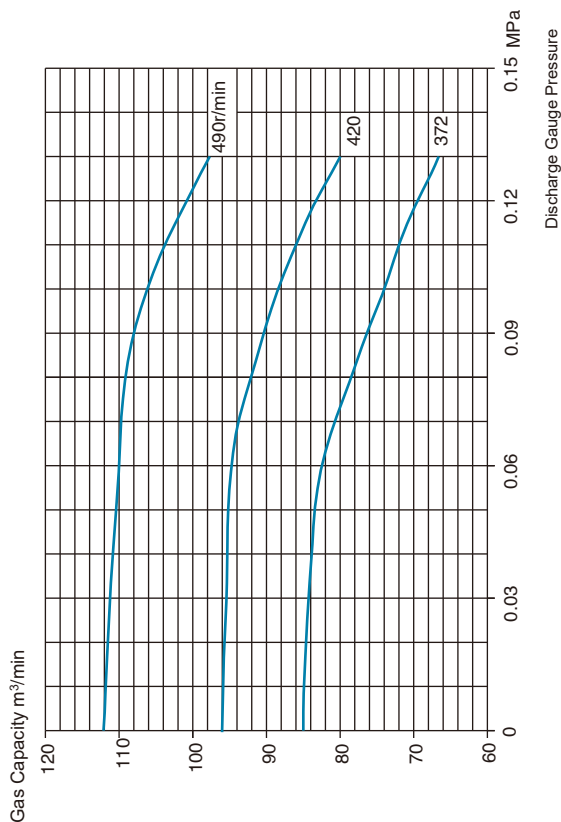
2BEX 405-8 Water Ring Compressor Suction, Shaft Power Curve



Rotating Speed	Water Supplied Amount
472	20-22.8
420	19-21.6
372	16.5-20

- 1, This curve is based on the air infested temperature of 20°C , the infested water temperature of 15°C , inhalation pressure for a standard atmospheric pressure of 1013 hpa (absolute pressure) under the conditions obtained performance curve;
- 2, Performance tolerance $\pm 5\%$.

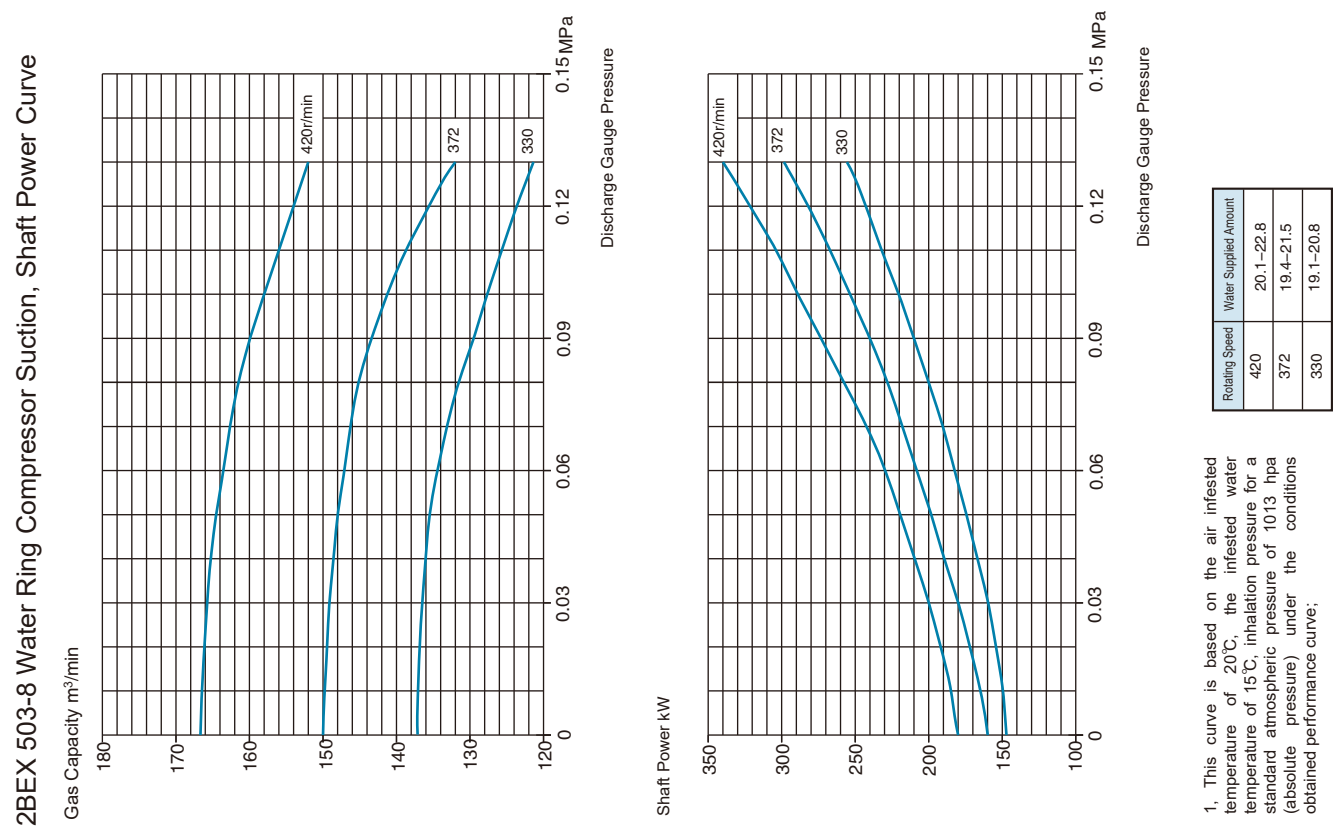
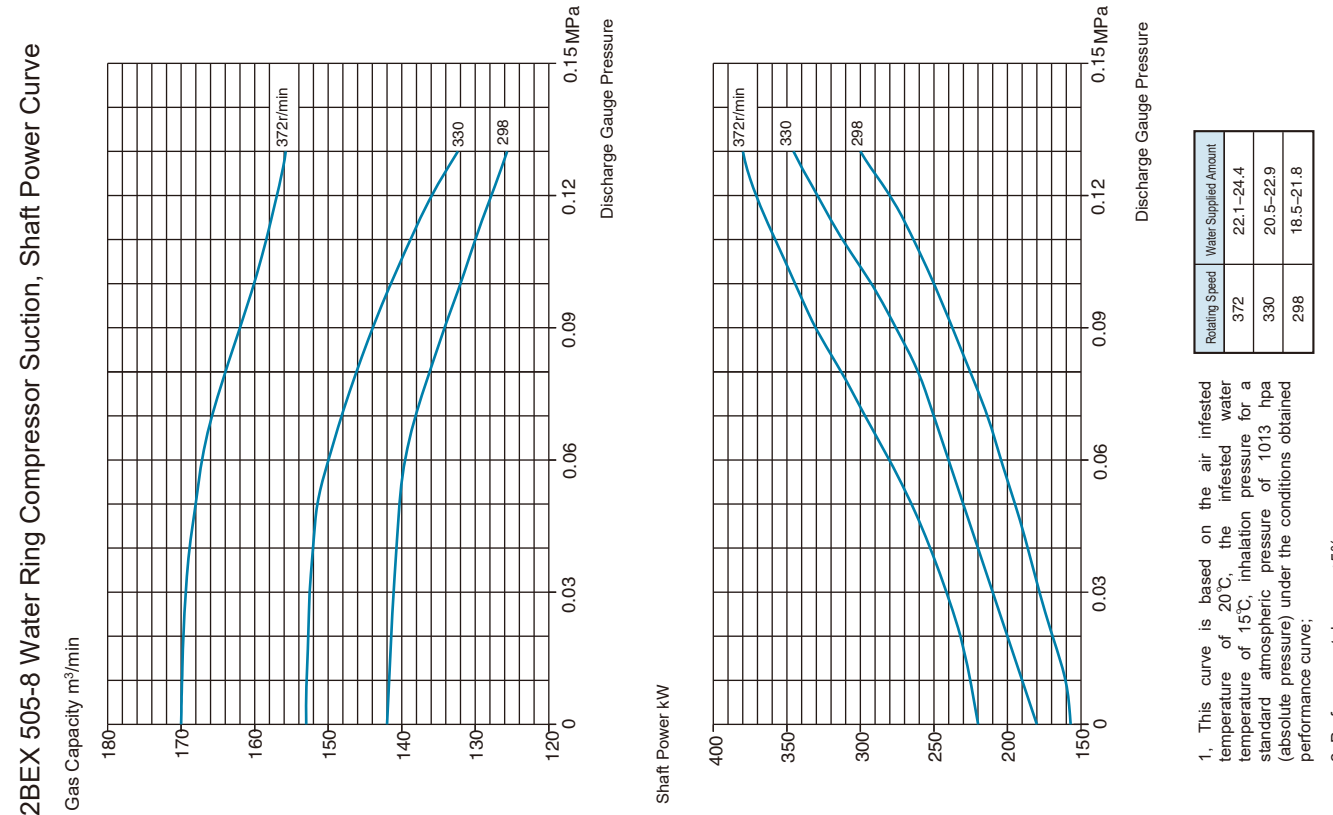
2BEX 403-8 Water Ring Compressor Suction, Shaft Power Curve



Rotating Speed	Water Supplied Amount
490	19.8-22
420	18.5-20
372	16-19.5

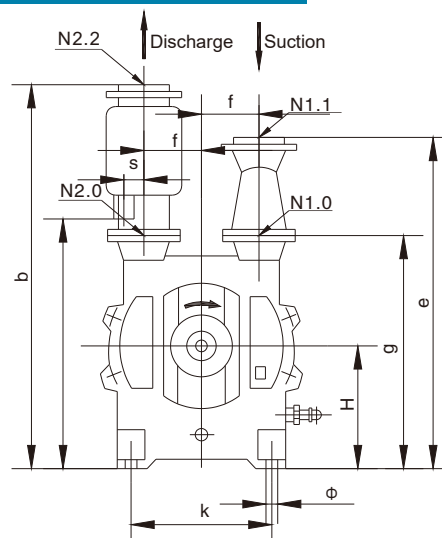
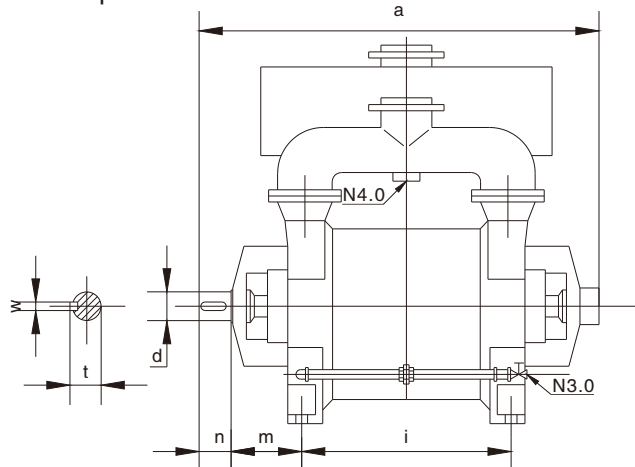
- 1, This curve is based on the air infested temperature of 20°C , the infested water temperature of 15°C , inhalation pressure for a standard atmospheric pressure of 1013 hpa (absolute pressure) under the conditions obtained performance curve;
- 2, Performance tolerance $\pm 5\%$.

2BEX 503/505-8 Water Ring Compressor Performance Curve

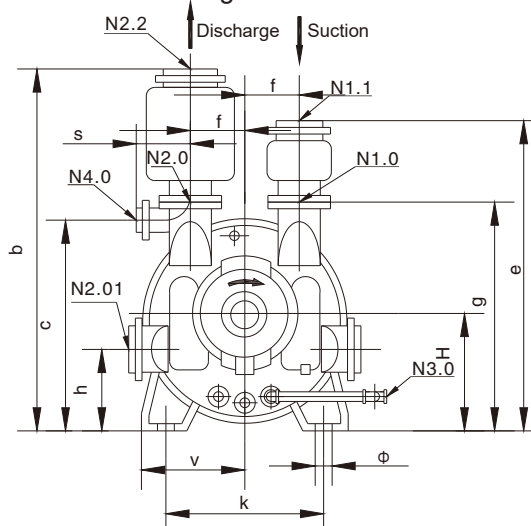
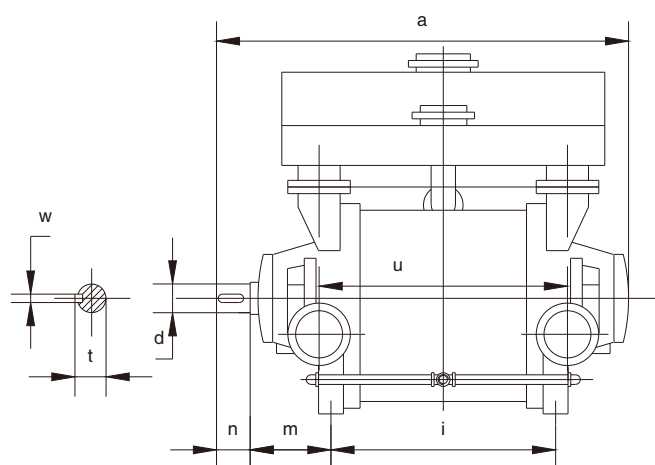


2BEX Series Water Ring Vacuum Pump and Compressor Installation Size

Pump Outline and Installation Size



2BEX10-25 Outline and Installation Size Diagram



2BEX30-70 Outline and Installation Size Diagram

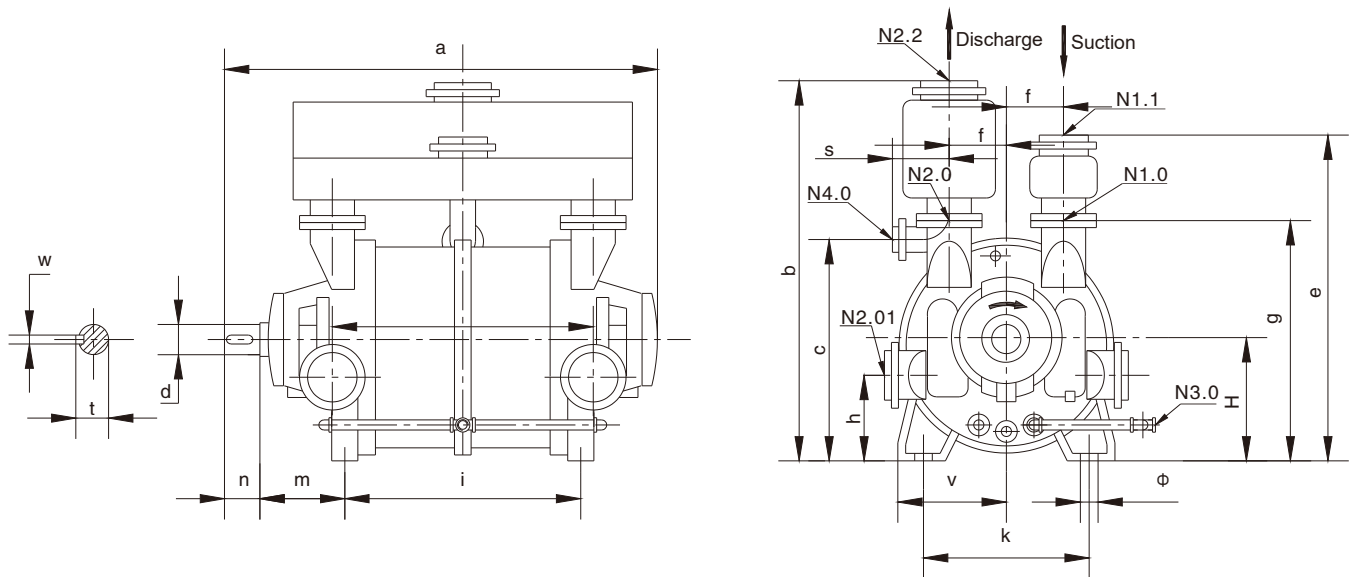
Model	Outline and Installation Size															
	a	b	c	e	f	g	h	i	m	n	s	k	Φ	d	w	t
2BEX101-0	638	645	394		105	355	180	206	146.5	58	40	220	15	35	10	38
2BEX102-0	741	645	394	495	105	355	180	262	193.5	58	40	220	15	35	10	38
2BEX103-0	795	645	394	495	105	355	180	316	193.5	58	40	200	15	35	10	38
2BEX152-0	807	745	467	600	125	425	225	302	206	58	50	260	19	35	10	38
2BEX153-0	885	745	467	600	125	425	225	380	206	58	50	260	19	35	10	38
2BEX202-0	975	985	629	840	155	590	315	395	243	82	50	340	24	50	14	53.5
2BEX203-0	1095	985	629	840	155	590	315	515	243	82	50	340	24	50	14	53.5
2BEX204-0	1131	985	629	840	155	590	315	551	243	82	50	340	24	50	14	53.5
2BEX252-0	1237	1245	799	1030	215	755	400	525	262.5	105	80	465	28	70	20	74.5
2BEX253-0	1395	1245	799	1030	215	755	400	675	262.5	105	80	465	28	70	20	74.5
2BEX303-0	1580	1360	825	1185	230	910	475	790	315	165	205	670	35	100	28	106
2BEX353-0	1745	1570	930	1370	285	1050	560	910	335	165	245	800	35	120	32	127
2BEX403-0	2020	1865	1120	1625	335	1265	670	1110	355	200	285	950	42	140	36	148
2BEX503-0	2255	2160	1335	1875	385	1475	800	1270	375	240	285	1120	42	160	40	169
2BEX603-0	2510	2560	1555	2220	435	1770	950	1480	400	240	370	1320	48	180	45	190
2BEX703-0	2885	2965	1835	2560	490	2045	1120	1720	450	280	370	1600	48	200	45	210
2BEX305-1	1695	1360	825	1185	230	910	475	900	315	165	205	670	35	100	28	106
2BEX355-1	1885	1570	930	1370	285	1050	560	1050	335	165	245	800	35	120	32	127
2BEX405-1	2170	1865	1120	1625	335	1265	670	1260	355	200	285	950	42	140	36	148
2BEX505-1	2435	2160	1336	1875	385	1475	800	1450	375	240	285	1120	42	160	40	169
2BEX605-1	2730	2560	1555	2220	435	1770	950	1700	400	240	370	1320	48	180	45	190
2BEX705-1	3185	2965	1835	2560	490	2045	1120	2020	450	280	370	1600	48	200	45	210

Water Ring Vacuum Pump, Compressor Product Samples

Notice: The 2BEX30-70 pump can also be arranged horizontally as needed (without the top air and water separator), or horizontally (without the top air inflection pipe and air and water separator), at which point the installation dimensions are set out in the table below.

Model	h	u	v
2BEX303-0	335	864	480
2BEX353-0	395	1000	555
2BEX403-0	475	1210	655
2BEX355/6-1	395	1140	555

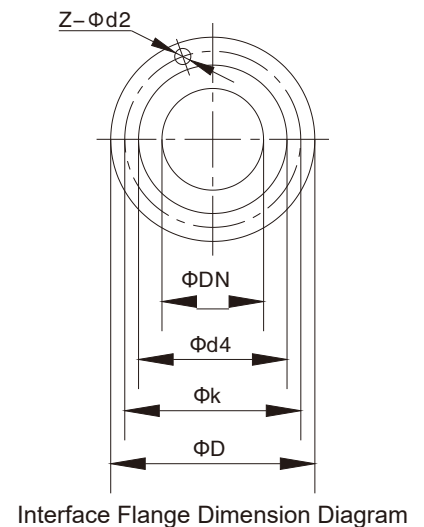
Model	h	u	v
2BEX405/6-1	475	1360	655
2BEX505/6-1	560	1590	750
2BEX605-1	665	1880	875
2BEX705-1	790	2230	1025



2BEX 356-1 Outline and Installation Size Diagram
406-1
506-1

Interface Name Table

Code	Name	Code	Name
N1.0	Pump Air Inlet	N2.01	Horizontal Air Vent
N1.1	Suction Tube Air Inlet	N3.0	Pump Water Inlet
N2.0	Pump Air Vent	N4.0	Separator Drain Outlet
N3.0	Separator Air Vent		



2BEX10-25 Interface Name Table

Model	N1.0 Pump Air Inlet						N1.1 Suction Tube Air Inlet						N3.0 Pump Water Inlet
	DN	d4	D	K	d2	Z	DN	d4	D	K	d2	Z	
2BEX101-0	50	99	165	125	18	4	65	118	185	145	18	4	Rp3/4
2BEX102-0	50	99	165	125	18	4	65	118	185	145	18	4	Rp3/4
2BEX103-0	50	99	165	125	18	4	65	118	185	145	18	4	Rp3/4
2BEX152-0	65	118	185	145	18	4	100	156	220	180	18	8	Rp3/4
2BEX153-0	65	118	185	145	18	4	100	156	220	180	18	8	Rp3/4
2BEX202-0	100	156	220	180	18	8	125	184	250	210	18	8	Rp3/4
2BEX203-0	100	156	220	180	18	8	125	184	250	210	18	8	Rp3/4
2BEX204-0	100	156	220	180	18	8	125	184	250	210	18	8	Rp3/4
2BEX252-0	125	184	250	210	18	8	150	211	285	240	22	8	Rp1 ¹ / ₄
2BEX253-0	125	184	250	210	18	8	150	211	285	240	22	8	Rp1 ¹ / ₄

Model	N2.0 Pump Air Vent						N2.2 Separator Air Vent						N4.0 Separator Drain
	DN	d4	D	K	d2	Z	DN	d4	D	K	d2	Z	
2BEX101-0	50	99	165	125	18	4	65	118	185	145	18	4	Rp2
2BEX102-0	50	99	165	125	18	4	65	118	185	145	18	4	Rp2
2BEX103-0	50	99	165	125	18	4	65	118	185	145	18	4	Rp2
2BEX152-0	65	118	185	145	18	4	100	156	220	180	18	8	Rp2
2BEX153-0	65	118	185	145	18	4	100	156	220	180	18	8	Rp2
2BEX202-0	100	156	220	180	18	8	125	184	250	210	18	8	Rp3
2BEX203-0	100	156	220	180	18	8	125	184	250	210	18	8	Rp3
2BEX204-0	100	156	220	180	18	8	125	184	250	210	18	8	Rp3
2BEX252-0	125	184	250	210	18	8	150	211	285	240	22	8	Rp3
2BEX253-0	125	184	250	210	18	8	150	211	285	240	22	8	Rp3

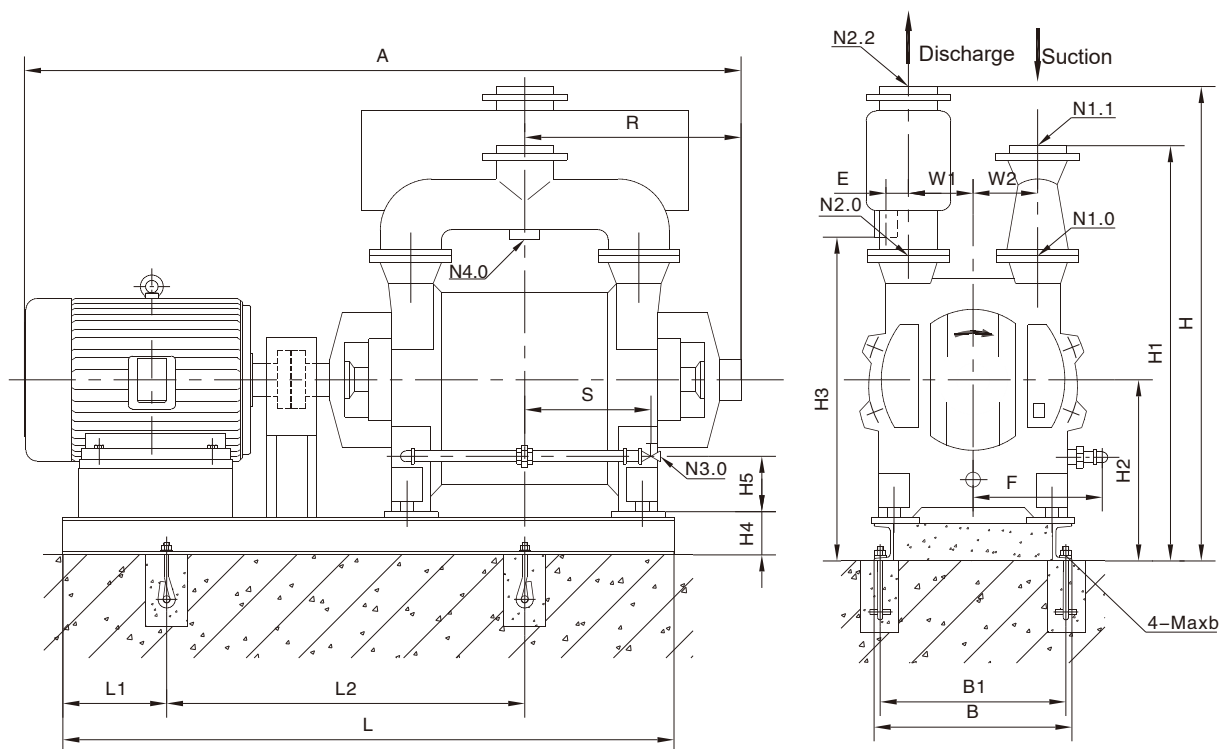
2BEX30-70 Interface Name Table

Model	N1.0 Pump Air Inlet						N1.1 Suction Tube Air Inlet					
	DN	d4	D	K	d2	8	DN	d4	D	K	d2	Z
2BEX303-0	150	211	285	240	22	8	200	266	340	295	22	8
2BEX305-1	150	211	285	240	22	8	200	266	340	295	22	8
2BEX353-0	200	266	340	295	22	8	250	319	392	350	22	12
2BEX355-1	200	266	340	295	22	12	250	319	392	350	22	12
2BEX403-0	250	319	395	350	22	12	300	370	445	400	22	12
2BEX405-1	250	319	395	350	22	12	300	370	445	400	22	12
2BEX503-0	300	370	445	400	22	12	350	429	505	460	22	16
2BEX505-1	300	370	445	400	22	12	350	429	505	460	22	16
2BEX603-0	350	429	505	460	22	12	400	480	565	515	26	16
2BEX605-1	350	429	505	460	22	12	400	480	565	515	26	16
2BEX703-0	400	480	565	515	22	12	500	582	670	620	26	20
2BEX705-1	400	480	565	515	22	12	500	582	670	620	26	20

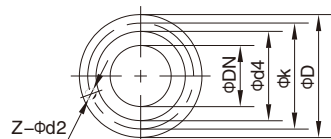
Model	N2.0 Pump Air Vent						N2.2 Separator Air Vent					
	DN	d4	D	K	d2	Z	DN	d4	D	K	d2	Z
2BEX303-0	150	211	285	240	22	8	200	266	340	295	22	8
2BEX305-1	150	211	285	240	22	8	200	266	340	295	22	8
2BEX353-0	200	266	340	295	22	8	250	319	392	350	22	12
2BEX355-1	200	266	340	295	22	12	250	319	392	350	22	12
2BEX403-0	250	319	395	350	22	12	300	370	445	400	22	12
2BEX405-1	250	319	395	350	22	12	300	370	445	400	22	12
2BEX503-0	300	370	445	400	22	12	350	429	505	460	22	16
2BEX505-1	300	370	445	400	22	12	350	429	505	460	22	16
2BEX603-0	350	429	505	460	22	12	400	480	565	515	26	16
2BEX605-1	350	429	505	460	22	12	400	480	565	515	26	16
2BEX703-0	400	480	565	515	22	12	500	582	670	620	26	20
2BEX705-1	400	480	565	515	22	12	500	582	670	620	26	20

Model	N1.01 Pump Horizontal Air Inlet/N2.01 Pump Horizontal Air Inlet						N4.0 Separator Drain						N3.0 Pump Water Inlet	N5.0 Shaft Seal Water Inlet
	DN	d4	D	K	d2	Z	DN	d4	D	K	d2	Z		
2BEX303-0	125	184	250	210	18	8	100	156	220	180	18	8	Rp11/2	Rp3/4
2BEX305-1	125	184	250	210	18	8	100	156	220	180	18	8	Rp11/2	Rp3/4
2BEX353-0	150	211	285	240	22	8	125	184	250	210	18	8	Rp11/2	Rp3/4
2BEX355-1	150	211	285	240	22	8	125	184	250	210	18	8	Rp11/2	Rp3/4
2BEX403-0	200	266	340	295	22	8	150	211	285	240	22	8	Rp11/2	Rp1
2BEX405-1	200	266	340	295	22	8	150	211	285	240	22	8	Rp11/2	Rp1
2BEX505-	250	319	392	350	22	12	150	211	285	240	22	8	Rp11/2	Rp1
2BEX505-1	250	319	392	350	22	12	150	211	285	240	22	8	Rp11/2	Rp1
2BEX603-0	300	370	445	400	22	12	200	266	340	295	26	8	R21/2	Rp1
2BEX605-1	300	370	445	400	22	12	200	266	340	295	26	8	R21/2	Rp1
2BEX703-0	350	429	505	460	22	16	200	266	340	295	26	8	Rp3	Rp1
2BEX705-1	350	429	505	460	22	16	200	266	340	295	26	8	Rp3	Rp1

2BEX 101-153 Motor Direct Connection Installation Dimension Diagram



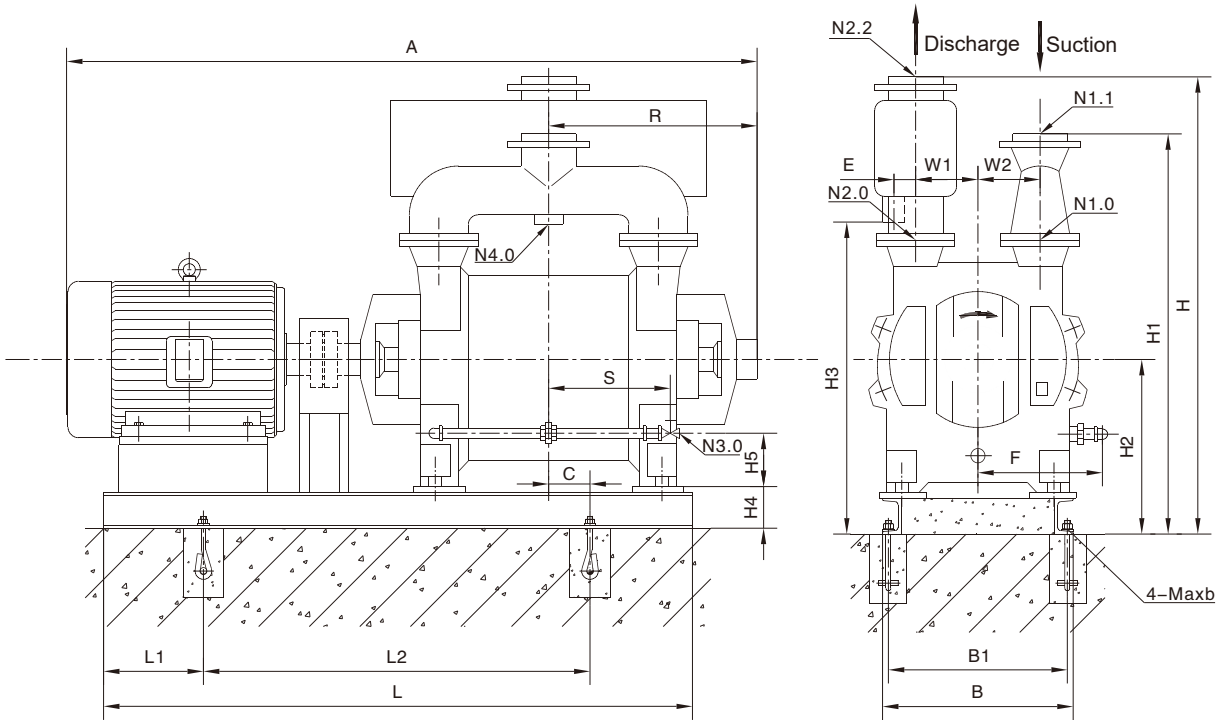
Interface Dimension Diagram



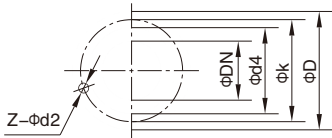
N1.0 Pump Air Inlet N2.0 Pump Air Vent N1.1 Suction Tube Air Inlet
N2.2 Separator Air Vent N3.0 Pump Water Inlet N4.0 Separator Drain

Code		A	B	B1	E	F	H	H1	H2	H3	H4	H5	L	L1	L2	R	S	W1	W2	a	b								
Model		1120	472	412	40	262	765	615	300	514	120	78	980	150	680	330.5	263	105	105	16	300								
2BEX 101		1120	472	412	40	262	765	615	300	514	120	78	980	150	680	330.5	263	105	105	16	300								
2BEX 102		1291	452	412	40	262	765	615	300	514	115	78	1014	157	700	358.5	291	105	105	16	300								
2BEX 103		1400	452	412	40	262	765	615	300	514	120	78	1175	207	738	358.5	318	105	105	16	300								
2BEX 152		1450	510	450	50	290	865	720	345	587	120	100	1300	235	830	392	318	125	125	16	300								
2BEX 153		1650	510	450	50	290	865	720	345	587	120	100	1320	200	830	431	318	125	125	16	300								
Code		DN	d4	D	k	d2	Z						Code		DN	d4	D	k	d2	Z									
Model		DN	d4	D	k	d2	Z						Model		DN	d4	D	k	d2	Z									
2BEX 101 2BEX 102 2BEX 103	N1.0	50	99	165	125	18	4						2BEX 152 2BEX 153	N1.0	65	118	185	145	18	4									
	N2.0													N2.0															
	N1.1	65	118	185	145	18	4							N1.1	100	156	220	180	18	8									
	N2.2													N2.2															
	N3.0	Rp3/4										N3.0		Rp1															
	N4.0	Rp2										N4.0		Rp2															

2BEX 202-252 Motor Direct Connection Installation Dimension Diagram



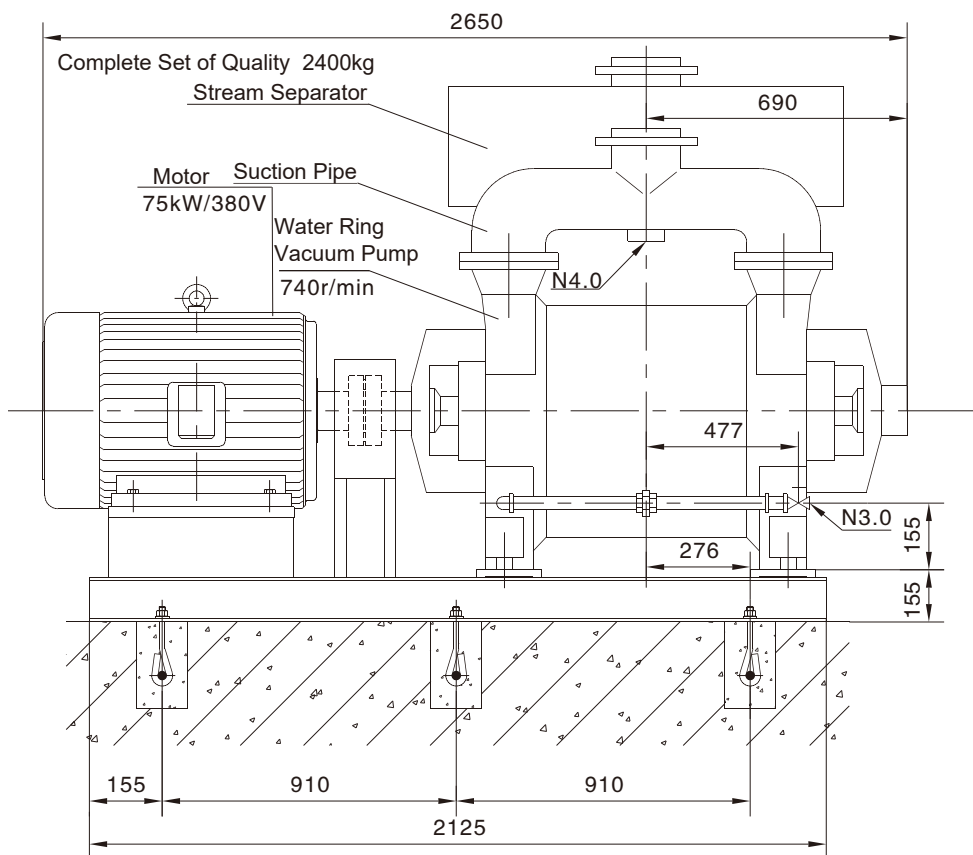
Interface Dimension Diagram



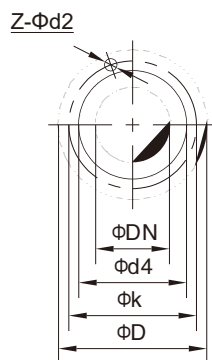
N1.0 Pump Air Inlet N2.0 Pump Air Vent N1.1 Suction Tube Air Inlet
N2.2 Separator Air Vent N3.0 Pump Water Inlet N4.0 Separator Drain

Code Model		A	B	B1	C	E	F	H	H1	H2	H3	H4	H5	L	L1	L2	R	S	W1	W2	a	b
2BEX 202		1785	660	600	120	50	440	1110	965	440	754	125	135	1530	215	1000	468.5	417	155	155	20	400
2BEX 203		2030	660	600	34	50	440	1110	965	440	754	125	135	1615	274	1060	528.5	477	155	155	20	400
2BEX 204		2066	660	600	98	50	440	1110	965	440	754	125	135	1810	280	1200	546.5	495	155	155	20	400
2BEX 252		2292	758	700	225	80	580	1425	1210	580	979	180	155	1800	120	1560	615	372	215	215	24	400
Code Model		DN	d4	D	k	d2	Z							Code Model		DN	d4	D	k	d2	Z	
2BEX 202 2BEX 203 2BEX 204	N1.0	100	156	220	180	18	8							2BEX 252	N1.0	125	184	250	210	18	8	
	N2.0																					
	N1.1	125	184	250	210	18	8						N1.1		150	211	285	240	22	8		
	N2.2																					
	N3.0							Rp1														
	N4.0	Rp3													Rp3							

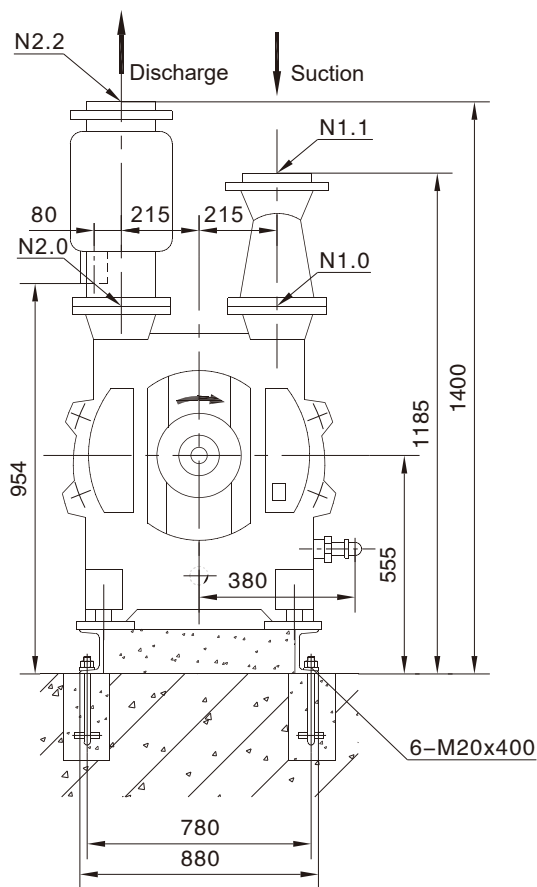
2BEX 253-0BD4-740 Installation Dimension Diagram



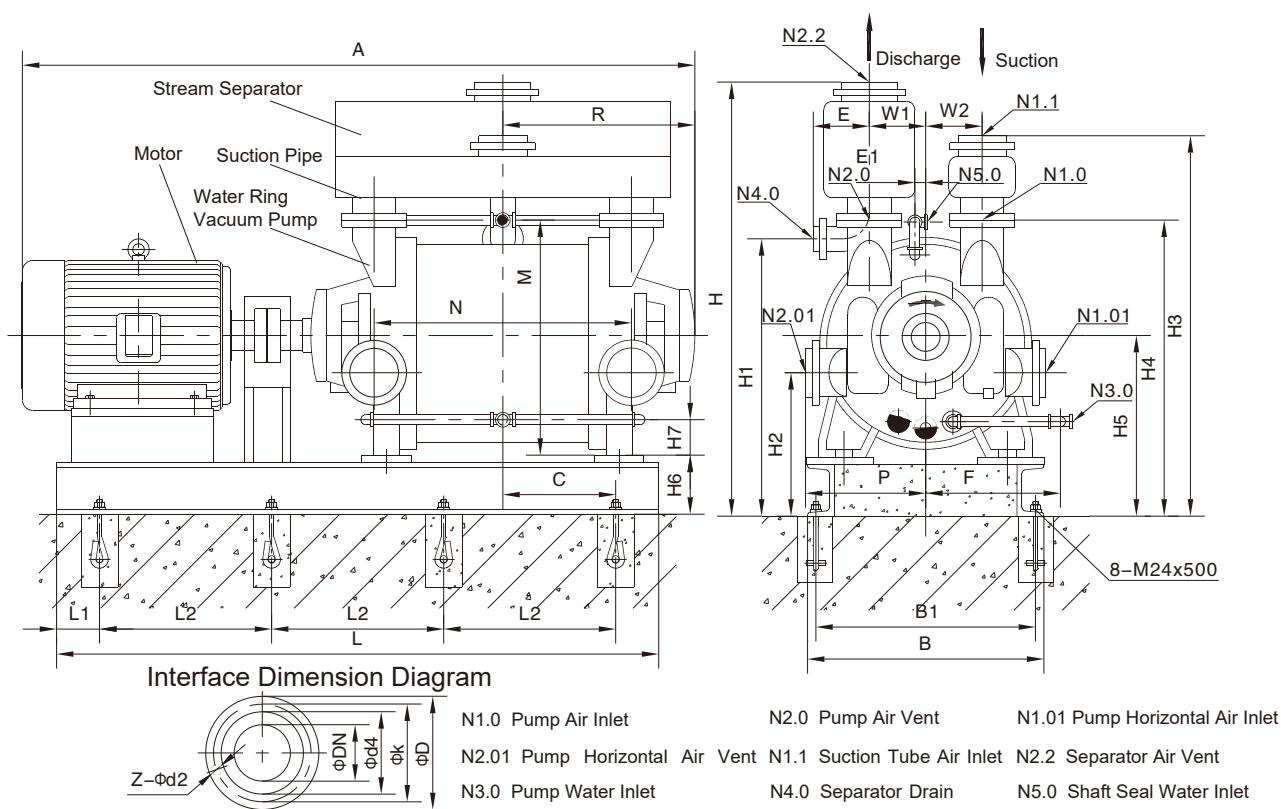
Interface Dimension Diagram



Interface Code	Interface Name	DN	d4	D	k	d2	Z					
N1.0	Pump Air Inlet	125	184	250	210	18	8					
N2.0	Pump Air Vent											
N1.1	Suction Tube Air Inlet	150	211	285	240	22	8					
N2.2	Separator Air Vent											
N3.0	Pump Water Inlet	Rp1 $\frac{1}{4}$										
N4.0	Separator Drain	Rp3										

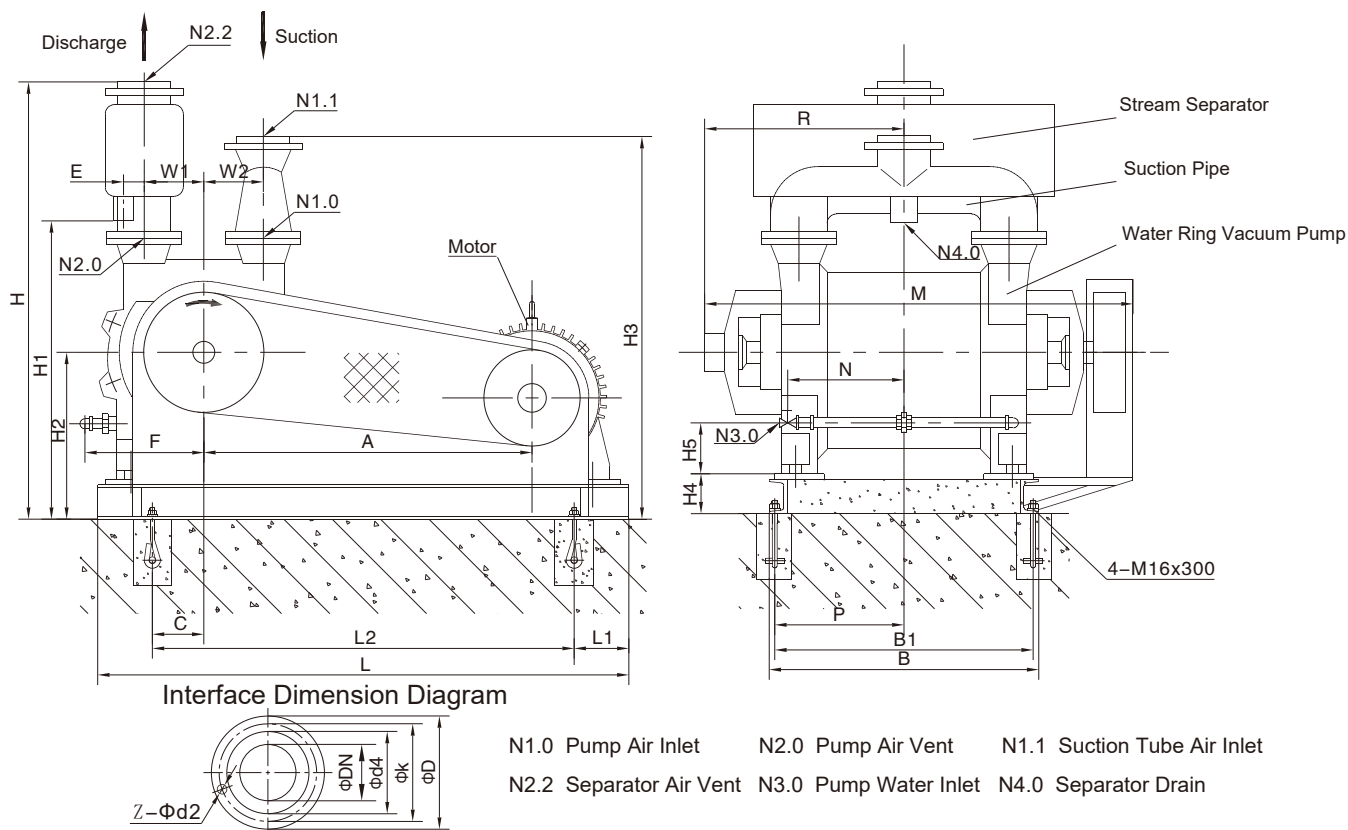


2BEX303-353 Motor Direct Connection Installation Dimension Diagram



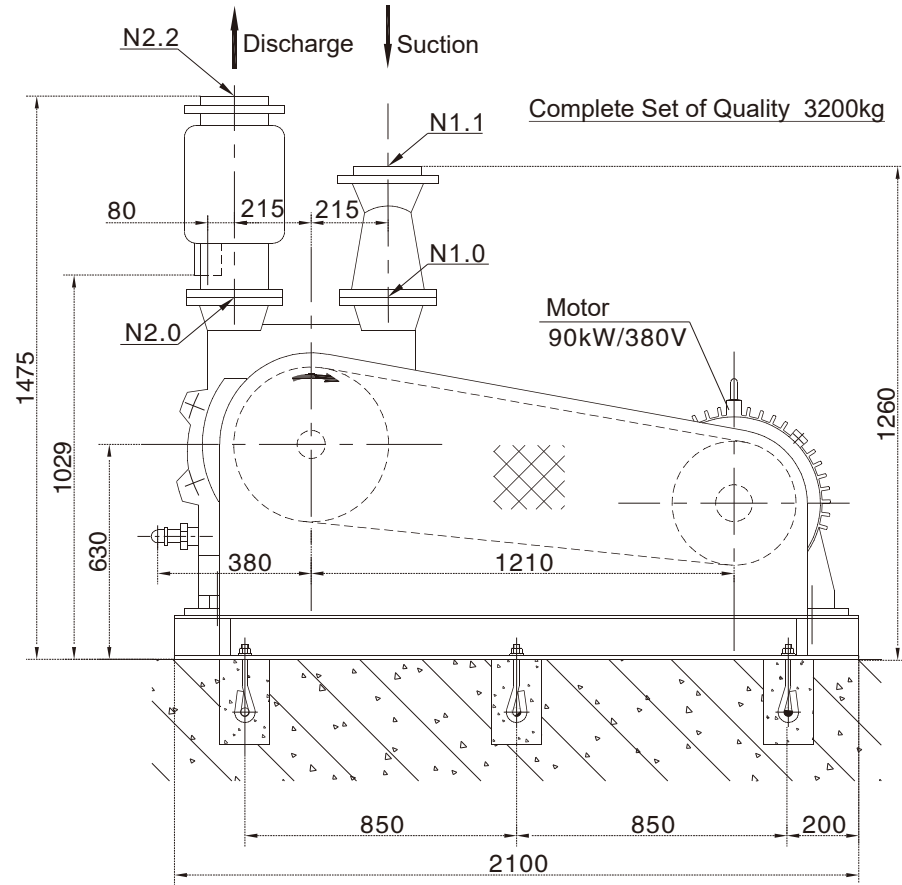
Code Model		A	B	B1	C	E	E1	F	H	H1	H2	H3	H4	H5	H6	H7
2BEX 303		3100	950	880	335	205	25	580	1590	1055	565	1415	1140	705	230	135
2BEX 305		2750	950	880	390	205	25	580	1590	1055	565	1415	1140	705	230	135
2BEX 353		3366	1080	1030	435	245	25	580	1800	1160	625	1600	1280	790	230	135
2BEX 355		3406	1080	1030	275	245	30	580	1800	1160	625	1600	1280	790	230	170
Code Model		L	L1	L2	M	N	P	R	W1	W2						
2BEX 303		2545	200	715	910	864	480	705	230	230						
2BEX 305		2620	200	750	910	980	480	765	230	230						
2BEX 303		2800	200	800	1080	1000	555	770	285	285						
2BEX 303		2950	200	850	1080	1040	555	860	285	285						
Code Model		DN	d4	D	k	d2	Z	Code Model		DN	d4	D	k	d2	Z	
2BEX 303 2BEX 305	N1.0	150	211	285	240	22	8	2BEX 353 2BEX 355	N1.0	200	266	340	295	22	8	
	N2.0															
	N1.01	125	184	250	210	18	8		N1.01	150	211	285	240	22	8	
	N2.01															
	N1.1	200	266	340	295	22	8		N1.1	250	319	395	350	22	12	
	N2.2															
	N3.0	Rp1 1/2							N3.0	Rp2						
	N4.0	100	156	220	180	18	8		N4.0	125	184	250	210	18	8	
	N5.0	Rp3/4							N5.0	Rp3/4						

2BEX 103/153/203 Belt Drive Installation Dimension Diagram

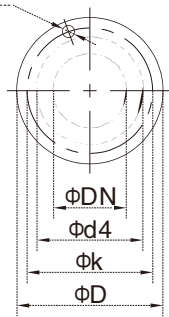


Code Model		A	B	B1	C	E	F	H	H1	H2	H3	H4	H5	L	L1	L2	M		
2BEX 103		628	700	635	124	40	262	830	579	365	680	185	78	1150	150	850	910		
2BEX 153		731	760	700	140	50	290	935	657	415	790	190	100	1185	95	1000	930		
2BEX 203		945	800	730	104	50	400	1195	839	525	1050	210	135	1700	200	1300	1543		
Code Model		N	P	R	W1	W2	a	b	Code Model			DN	d4	D	k	d2	Z		
2BEX 103		318	288	385.5	105	105	16	300	2BEX 103			N1.0	50	99	165	125	18	4	
2BEX 153		318	340	431	125	125	16	300				N2.0							
2BEX 203		477	312	528.5	155	155	20	400				N1.1	65	118	185	145	18	4	
												N2.2							
												N3.0	Rp3/4						
												N4.0	Rp2						
Code Model		DN	d4	D	k	d2	Z	Code Model			DN	d4	D	k	d2	Z			
2BEX 153		N1.0	65	118	185	145	18	4	2BEX 203			N1.0	100	156	220	180	18	8	
		N2.0										N2.0							
		N1.1	100	156	220	180	18	8				N1.1	125	184	250	210	18	8	
		N2.2										N2.2							
		N3.0	Rp1									N3.0	Rp1						
		N4.0	Rp2									N4.0	Rp3						

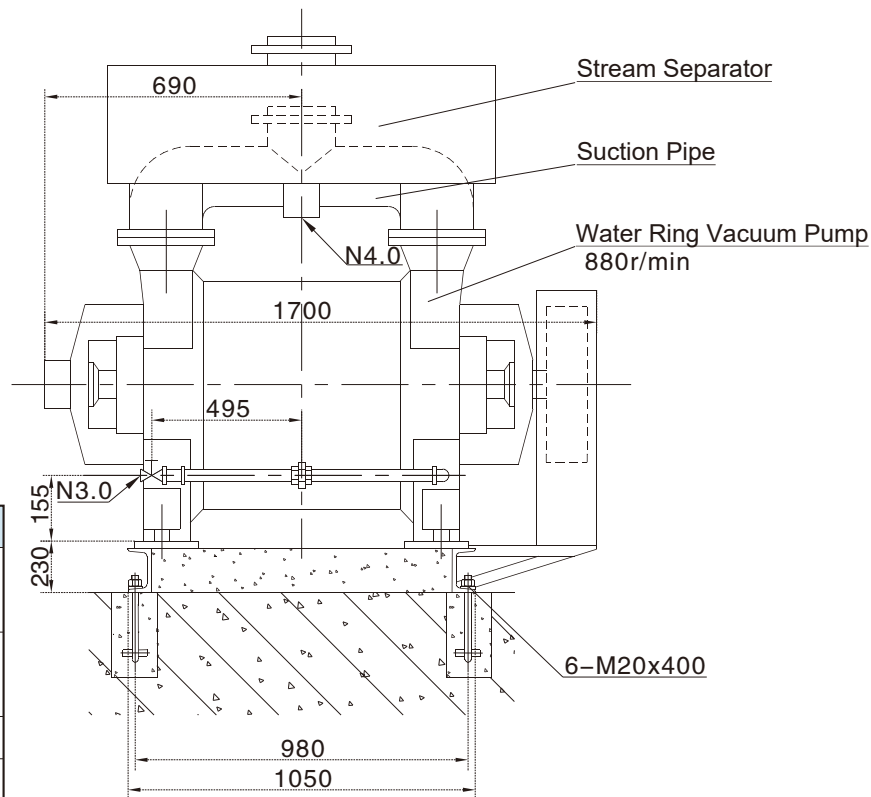
2BEX 253-0BV4-880 Installation Dimension Diagram



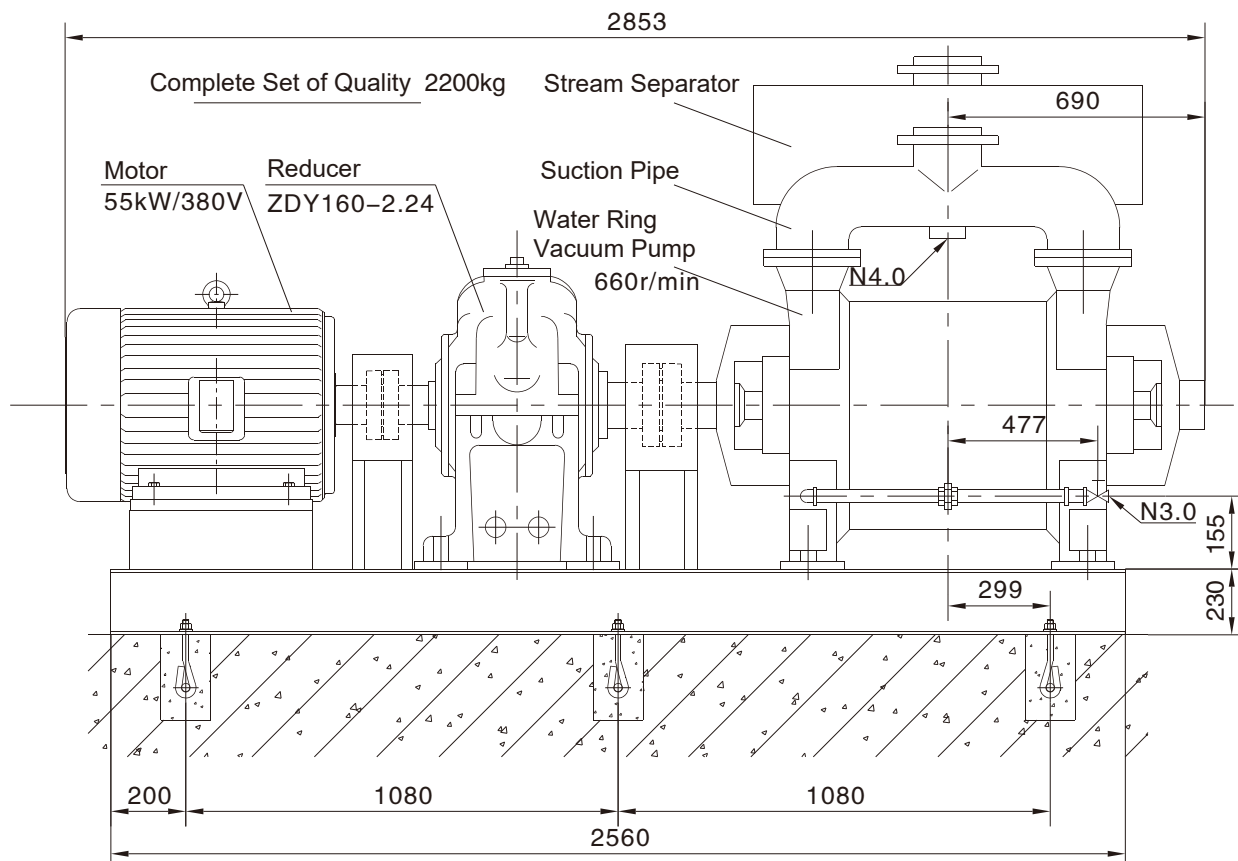
Interface Dimension Diagram
Z-Φd2



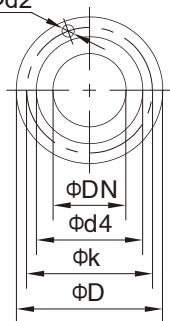
Interface Code	Interface Name	DN	d4	D	k	d2	Z					
N1.0	Pump Air Inlet	125	184	250	210	18	8					
N2.0	Pump Air Vent											
N1.1	Suction Tube Air Inlet	150	211	285	240	22	8					
N2.2	Separator Air Vent											
N3.0	Pump Water Inlet	Rp1 $\frac{1}{4}$										
N4.0	Separator Drain	Rp3										



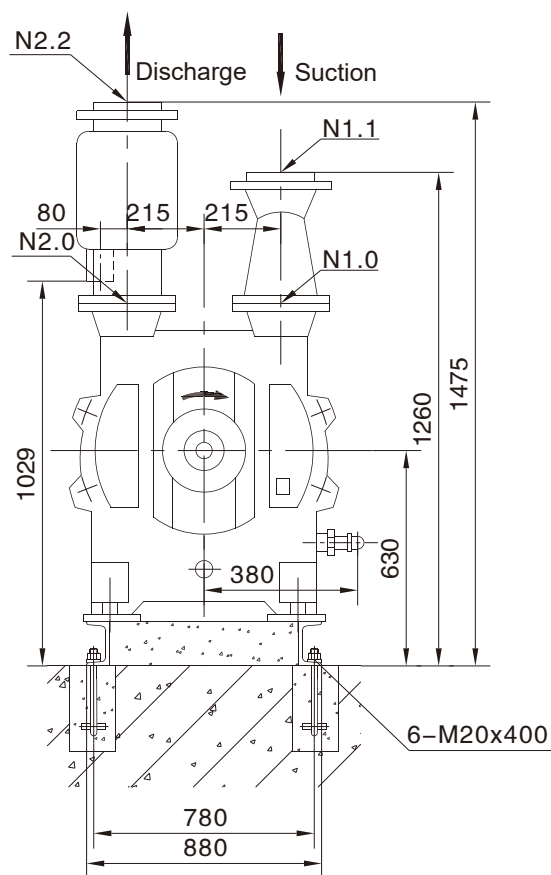
2BEX 253-0BG3-660 Installation Dimension Diagram



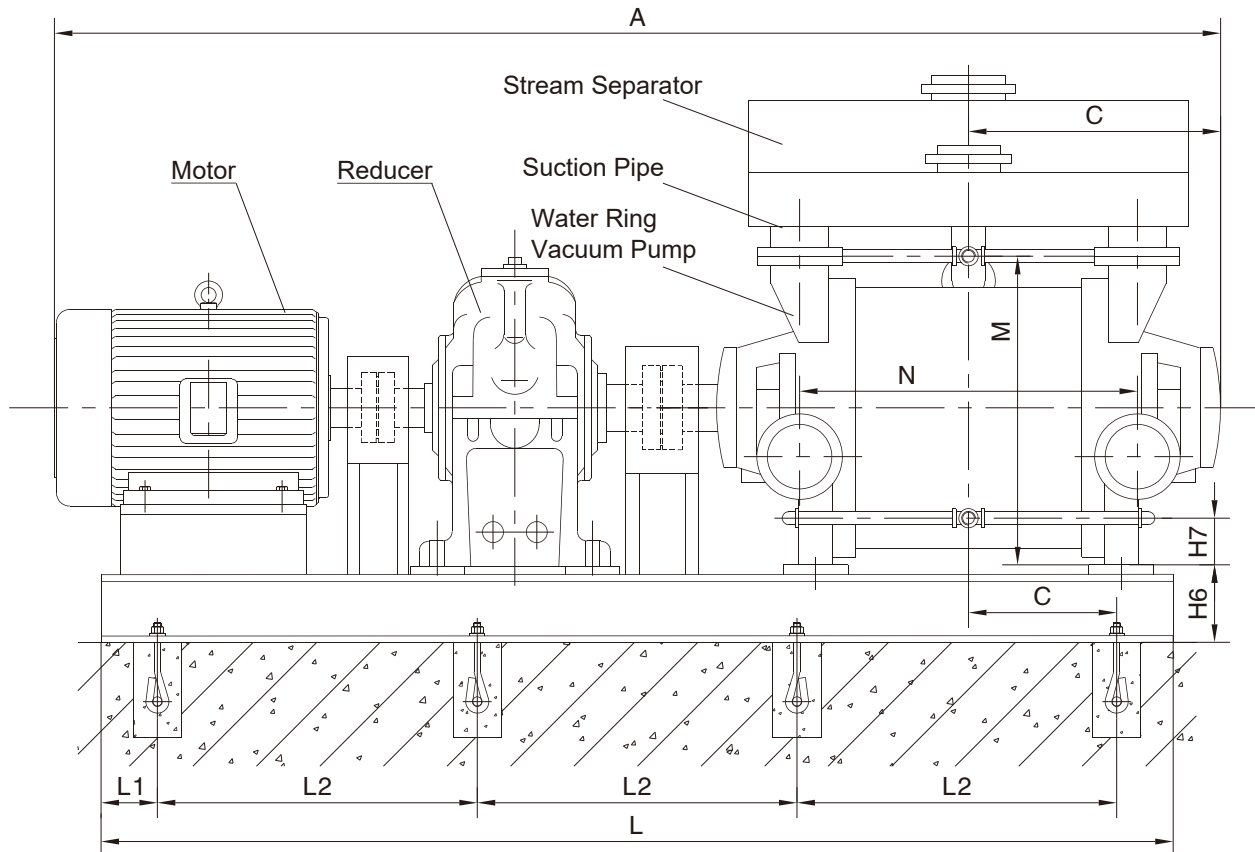
Interface Dimension Diagram
Z-Φd2



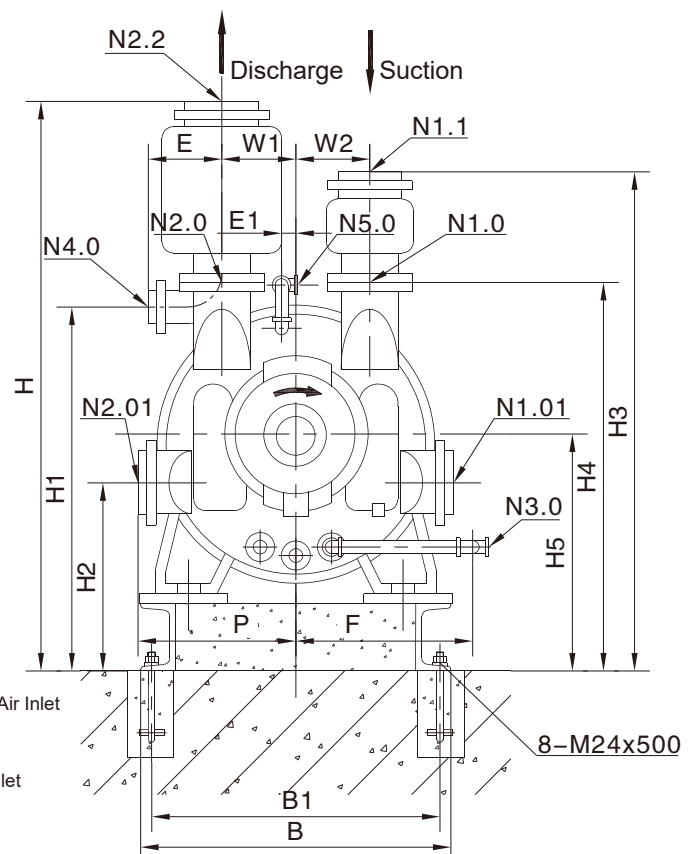
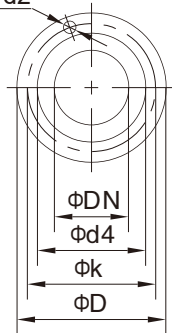
Interface Code	Interface Name	DN	d4	D	k	d2	Z					
N1.0	Pump Air Inlet	125	184	250	210	18	8					
N2.0	Pump Air Vent											
N1.1	Suction Tube Air Inlet	150	211	285	240	22	8					
N2.2	Separator Air Vent											
N3.0	Pump Water Inlet	Rp1 ₄										
N4.0	Separator Drain	Rp3										



2BEX 303/353/355/403/405 Reducer Drive Installation Dimension Diagram



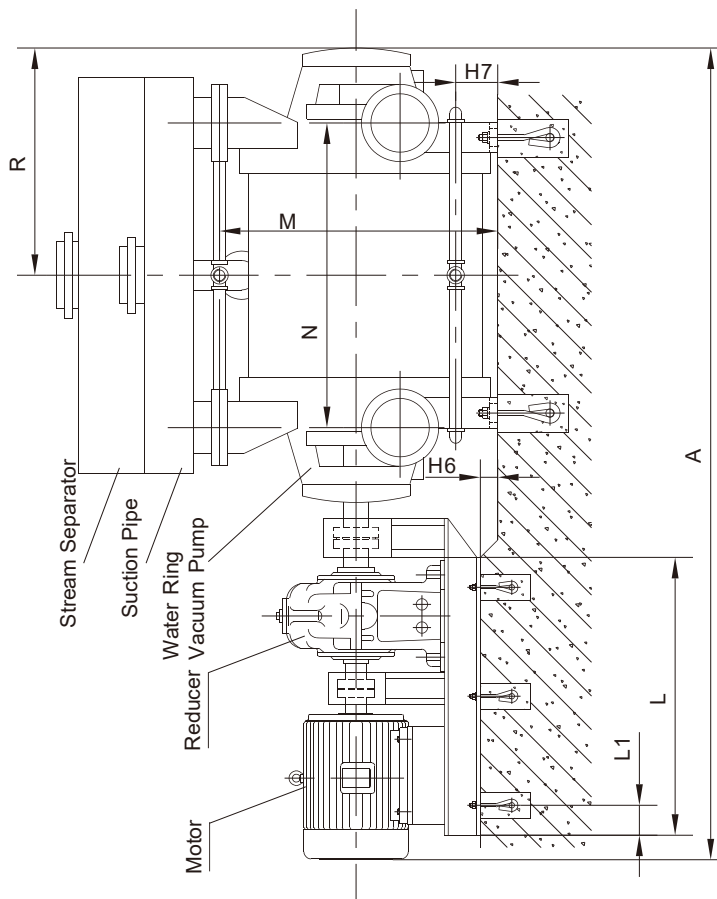
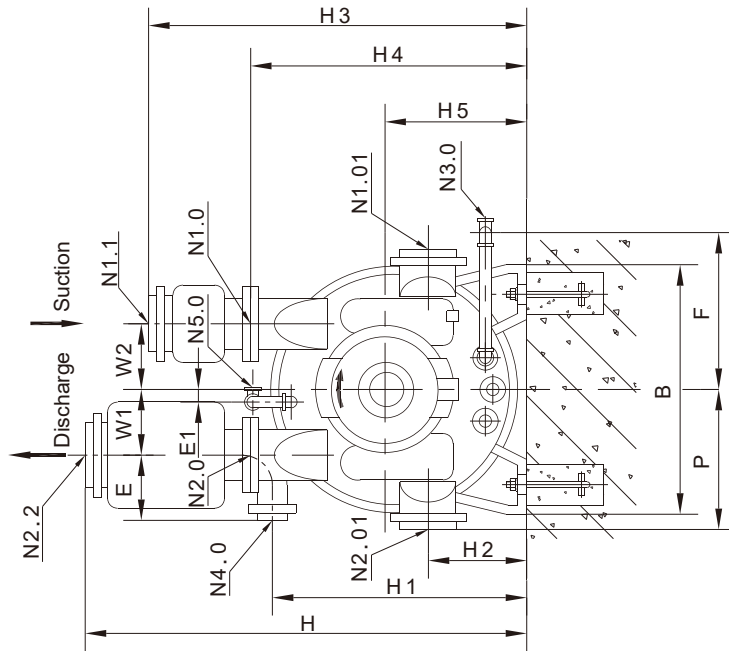
Interface Dimension Diagram
Z- $\Phi d2$



- | | | |
|--------------------------------|----------------------------|---------------------------------|
| N1.0 Pump Air Inlet | N2.0 Pump Air Vent | N1.01 Pump Horizontal Air Inlet |
| N2.01 Pump Horizontal Air Vent | N1.1 Suction Tub Air Inlet | N2.2 Separator Air Vent |
| N3.0 Pump Water Inlet | N4.0 Separator Drain | N5.0 Shaft Seal Water Inlet |

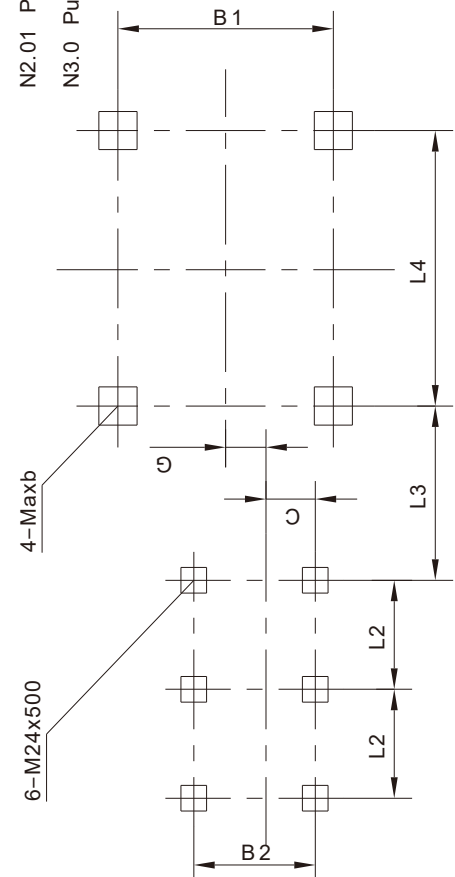
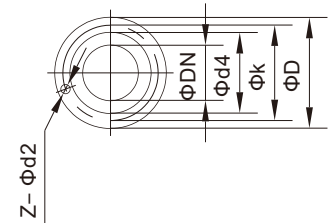
Code		A	B	B1	C	E	E1	F	H	H1	H2	H3	H4	H5	H6	H7	L	L1
Model																		
2BEX 303		3470	950	880	390	205	25	580	1635	1100	610	1460	1185	750	275	135	3100	200
2BEX 353		3600	1210	1130	430	245	25	580	1910	1270	735	1710	1390	900	340	170	3150	210
2BEX 355		3590	1105	1025	430	245	30	580	1930	1290	755	1730	1410	920	360	170	3510	310
2BEX 403		4050	1280	1200	443	285	30	650	2220	1475	830	1980	1620	1025	355	180	3580	200
2BEX 405		4466	1510	1430	518	285	40	650	2220	1475	829	1980	1620	1025	355	180	4305	310
Code		L2	M	N	P	R	W1	W2		Code		DN	d4	D	k	d2	Z	
Model										Model								
2BEX 303		900	920	864	480	705	230	230	2BEX 303	N1.0		150	211	285	240	22	8	
2BEX 353		910	1080	1000	555	770	285	285		N2.0								
2BEX 355		960	1080	1140	555	860	285	285		N1.01		125	184	250	210	18	8	
2BEX 403		1060	1620	1210	655	1010	335	335		N2.01								
2BEX 405		1180	1635	1360	655	985	335	335		N1.1		200	266	340	295	22	8	
										N2.2								
										N3.0		Rp1 ¹ / ₂						
										N4.0		100	156	220	180	18	8	
										N5.0		Rp3/4						
Code		DN	d4	D	k	d2	Z		Code		DN	d4	D	k	d2	Z		
Model									Model									
2BEX 353 2BEX 355	N1.0	200	266	340	295	22	8		2BEX 403 2BEX 405	N1.0	250	319	395	350	22	12		
	N2.0									N2.0								
	N1.01	150	211	285	240	22	8			N1.01	200	266	340	295	22	8		
	N2.01									N2.01								
	N1.1	250	319	395	350	22	12			N1.1	300	370	445	400	22	12		
	N2.2									N2.2								
	N3.0	Rp2								N3.0	Rp2							
	N4.0	125	184	250	210	18	8			N4.0	150	211	285	240	22	8		
	N5.0	Rp3/4								N5.0	Rp1							

2BEX 503/505/603/605 Reducer Drive Installation Dimension Diagram



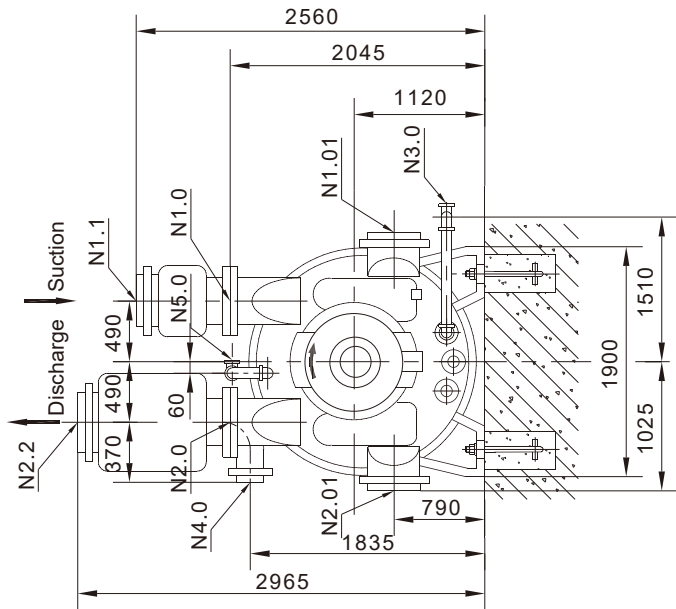
N1.0 Pump Air Inlet
N2.01 Pump Horizontal Air Vent
N3.0 Pump Water Inlet
N2.0 Pump Water Inlet
N1.1 Suction Tube Air Inlet
N4.0 Separator Drain
N1.01 Pump Horizontal Air Inlet
N2.2 Separator Air Vent
N5.0 Shaft Seal Water Inlet

Installation Dimension Diagram



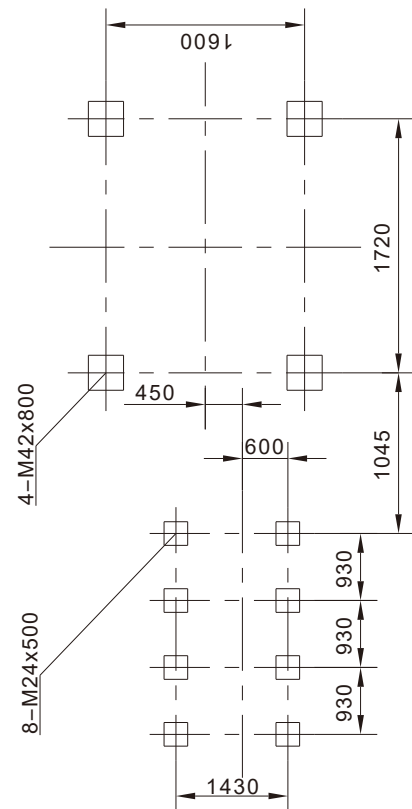
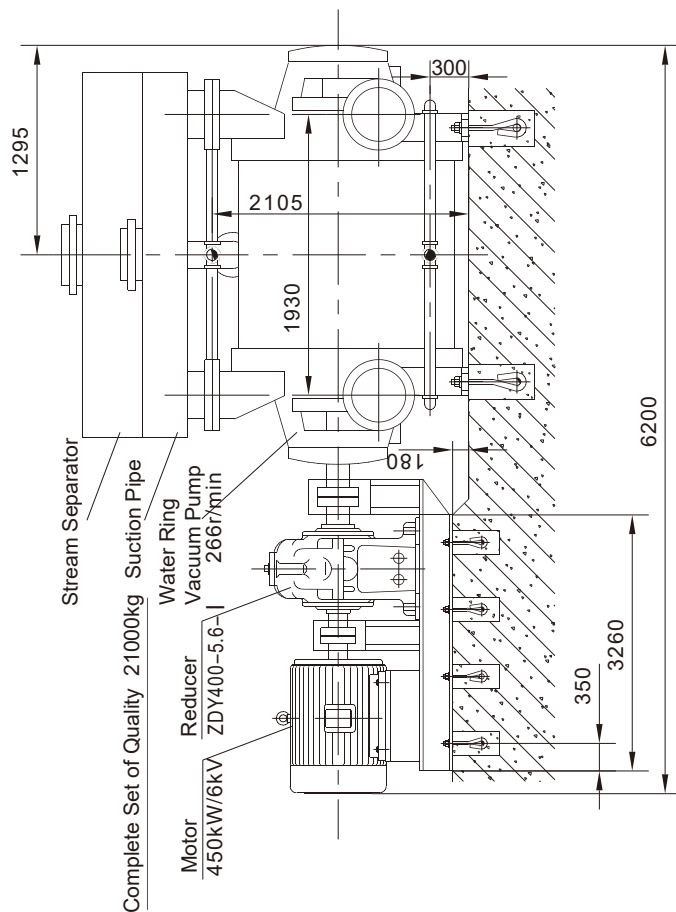
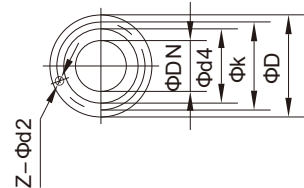
Code Model		A	B	B1	B2	C	E	E1	F	G	H	H1	H2	H3	H4	H5
2BEX 503		5260	1370	1120	970	390	285	40	750	315	2160	1335	560	1875	1475	800
2BEX 505		5440	1370	1120	970	390	285	40	750	315	2160	1335	560	1875	1475	800
2BEX 603		5360	1620	1320	1140	435	285	50	850	400	2560	1555	665	2220	1770	950
2BEX 605		5580	1620	1320	1140	435	285	50	850	400	2560	1555	665	2220	1770	950
Code Model		H6	H7	L	L1	L2	L3	L4	M	N	P	R	W1	W2	a	b
2BEX 503		125	215	2460	200	1080	856	1240	1475	1510	750	1005	385	385	36	600
2BEX 505		125	215	2460	200	1080	856	1420	1475	1590	750	1095	385	385	36	600
2BEX 603		140	245	2740	250	1170	930	1480	1730	1680	875	1130	385	385	42	600
2BEX 605		140	245	2740	250	1170	930	1700	1730	1900	875	1240	385	385	42	600
Code Model		DN	d4	D	k	d2	Z	Code Model			DN	d4	D	k	d2	Z
2BEX 503 2BEX 505	N1.0	300	370	445	400	22	12	2BEX 603 2BEX 605	N1.0	350	429	505	460	22	16	
	N2.0								N2.0							
	N1.01	250	319	395	350	22	12		N1.01	300	370	445	400	22	12	
	N2.01								N2.01							
	N1.1	350	429	505	460	22	16		N1.1	400	480	565	515	26	16	
	N2.2								N2.2							
	N3.0	Rp2							N3.0	Rp2 ¹ / ₂						
	N4.0	150	211	285	240	22	8		N4.0	200	266	340	295	22	8	
	N5.0	Rp1							N5.0	Rp1						

2BEX 703-0BG3-266 Installation Dimension Diagram

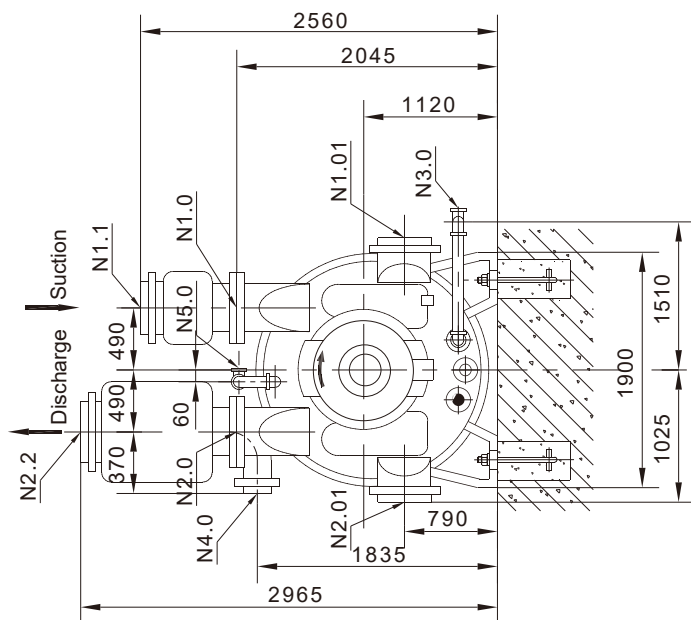


Interface Code	Interface Name	DN	d4	D	k	d2	Z
N1.0	Pump Air Inlet	400	480	565	515	26	16
N2.0	Pump Air Vent						
N1.01	Pump Horizontal Air Inlet	350	429	505	460	22	16
N2.01	Pump Horizontal Air Vent						
N1.1	Suction Tube Air Inlet	500	582	670	620	26	20
N2.2	Separator Air Vent						
N3.0	Pump Water Inlet						
N4.0	Separator Drain	250	319	395	350	22	12
N5.0	Shaft Seal Water Inlet						

Interface Dimension Diagram

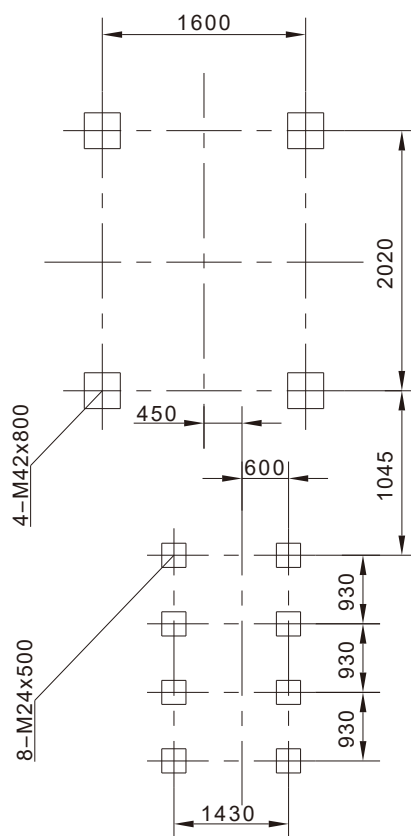
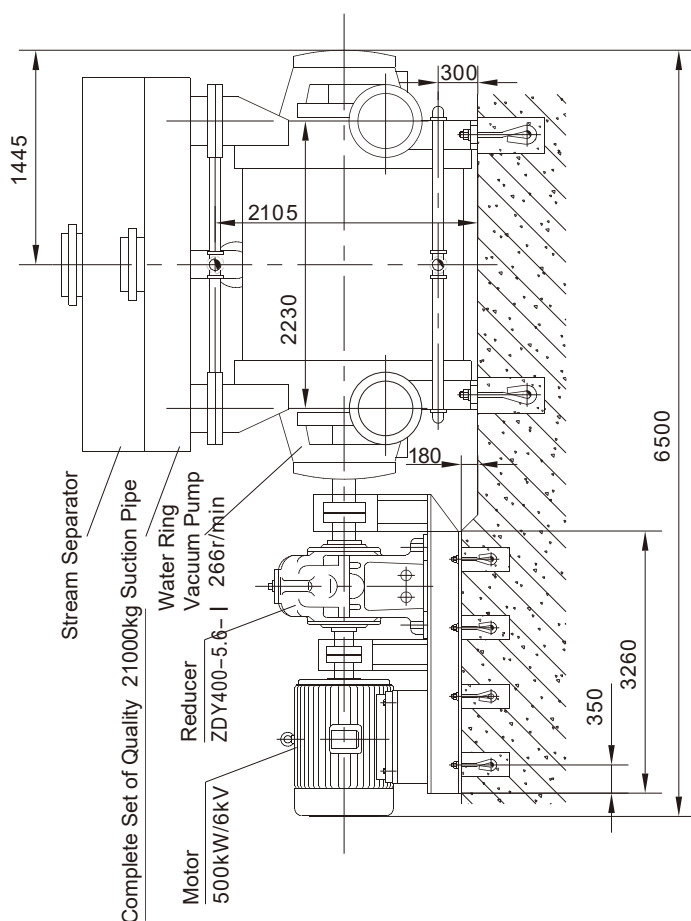
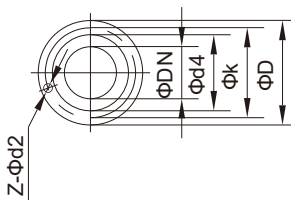


2BEX 705-1BG3-266 Installation Dimension Diagram



Interface Code	Interface Name	DN	d4	D	k	d2	Z
N1.0	Pump Air Inlet	400	480	565	515	26	16
N2.0	Pump Air Vent						
N1.01	Pump Horizontal Air Inlet	350	429	505	460	22	16
N2.01	Pump Horizontal Air Vent						
N1.1	Suction Tube Air Inlet	500	582	670	620	26	20
N2.2	Separator Air Vent						
N3.0	Pump Water Inlet						
N4.0	Separator Drain	250	319	395	350	22	12
N5.0	Shaft Seal Water Inlet						

Interface Dimension Diagram



2BEX Series Water Ring Vacuum Pump Matching Table

Model	Rotating Speed (r/min)	Transmission Mode	Unit Configuration	Unit Code
2BEX 101-0	1450	Direct	Motor: 5.5 kW, 380V	2BEX 101-0BD4-1450
			Motor: 5.5 kW, 380V, d II BT4	2BEX 101-0BD4-1450
2BEX 102-0	1450	Direct	Motor: 7.5 kW, 380V	2BEX 102-0BD4-1450
			Motor: 7.5 kW, 380V, d II BT4	2BEX 102-0BD4-1450
2BEX 103-0	1300	Belt	Motor: 1.1 kW, 380V Narrow V-band:SPZ1800	2BEX 103-0BV4-1300
	1450	Direct	Motor: 1.1 kW, 380V	2BEX 103-0BD4-1450
			Motor: 1.1 kW, 380V, d II BT4	2BEX 103-0BD4-1450
2BEX 152-0	1450	Direct	Motor: 1.5 kW, 380V	2BEX 152-0BD4-1450
			Motor: 1.5 kW, 380V, d II BT4	2BEX 152-0BD4-1450
2BEX 153-0	980	Direct	Motor: 1.1 kW, 380V	2BEX 153-0BD4-980
			Motor: 1.1 kW, 380V, d II BT4	2BEX 153-0BD4-980
	1300	Belt	Motor: 1.8.5 kW, 380V Narrow V-band:SPA1800	2BEX 153-0BV4-1300
	1450	Direct	Motor: 1.8.5 kW, 380V	2BEX 153-0BD4-1450
			Motor: 1.8.5 kW, 380V, d II BT4	2BEX 153-0BD4-1450
	1625	Belt	Motor: 2.2 kW, 380V Narrow V-band: SPA3150	2BEX 153-0BV4-1625
	1750	Belt	Motor: 2.2 kW, 380V Narrow V-band:SPA3150	2BEX 153-0BV4-1750
2BEX202-0	980	Direct	Motor: 2.2 kW 6P	2BEX 202-0BD4-980
2BEX202A-0	980	Direct	Motor: 3.0 kW 6P	2BEX 202A-0BD4-980
2BEX 203-0	790	Belt	Motor: 3.0 kW, 380V Narrow V-band:SPB2800	2BEX 203-0BV4-790
	880	Belt	Motor: 3.0 kW, 380V Narrow V-band:SPB2800	2BEX 253-0BV4-880
	980	Direct	Motor: 3.7 kW, 380V	2BEX 203-0BD4-980
			Motor: 3.7 kW, 380V, d II BT4	2BEX 203-0BD4-980
2BEX 204-0	980	Direct	Motor: 3.7 kW, 380V	2BEX 204-0BD4-980
			Motor: 3.7 kW, 380V, d II BT4	2BEX 204-0BD4-980
2BEX 252-0	565	Belt	Motor: 3.0 kW, 380V Narrow V-band:SPB3150	2BEX 252-0BV4-565
	660	Belt	Motor: 3.7 kW, 380V Narrow V-band:SPB3150	2BEX 252-0BV4-660
	740	Belt	Motor: 4.5 kW, 380V Narrow V-band:SPB3150	2BEX 252-0BV4-740
		Direct	Motor: 4.5 kW, 380V	2BEX 252-0BD4-740
			Motor: 4.5 kW, 380V, d II BT4	2BEX 252-0BD4-740
	820	Belt	Motor: 5.5 kW, 380V Narrow V-band:SPB3150	2BEX 252-0BV4-820

Model	Rotating Speed (r/min)	Transmission Mode	Unit Configuration	Unit Code
2BEX252A-0	740	Direct	Motor: 5 5kW8P	2BEX 252A-0BV4-740
2BEX 253-0	565	Belt	Motor: 4 5kW, 3 80V Narrow V-band: SPB3150	2BEX 253-0BV4-565
		Direct	Motor: 4 5kW, 3 80V Motor: 4 5kW, 3 80V, d II BT4	2BEX 253-0BD4-590 2BEX 253-0BD4-590
	660	Belt	Motor: 5 5kW, 3 80V Narrow V-band: SPB3150	2BEX 253-0BV4-660
		Direct	Motor: 7 5kW, 3 80V Motor: 7 5kW, 3 80V, d II BT4	2BEX 253-0BD4-740 2BEX 253-0BD4-740
	820	Belt	Motor: 7 5kW, 3 80V Narrow V-band: SPB3150	2BEX 253-0BV4-820
2BEX 303-0	590	Belt	Motor: 7 5kW, 3 80V Narrow V-band: SPB3550	2BEX 303-0BV3-590
		Direct	Motor: 7 5kW, 3 80V Motor: 7 5kW, 3 80V, d II BT4	2BEX 303-0BD3-590 2BEX 303-0BD3-590
		Direct	Motor: 1 32kW, 3 80V Motor: 1 32kW, 3 80V, d II BT4	2BEX 303-0BD3-740 2BEX 303-0BD3-740
	740	Direct	Motor: 1 32kW, 3 80V Motor: 1 32kW, 3 80V, d II BT4	2BEX 303-0BD3-740 2BEX 303-0BD3-740
2BEX 305-1	590	Direct	Motor: 9 0kW, 3 80V Motor: 9 0kW, 3 80V, d II BT4	2BEX 305-1BD4-590 2BEX 305-1BD4-590
		Belt	Motor: 9 0kW, 3 80V Narrow V-band: SPB3550	2BEX 305-1BV3-590
2BEX 353-0	420	Reducer	Motor: 9 0kW, 3 80V Reducer: ZDY200-3.5 5- I (Coiled Tube Cooling)	2BEX 353-0BG3-420
			Motor: 9 0kW, 3 80V Reducer: ZDY200-3.5 5- I (Coiled Tube Cooling)	2BEX 353-0BG3-420
	472	Belt	Motor: 1 10kW, 3 80V Narrow V-band: SPC4000	2BEX 353-0BV3-472
		Reducer	Motor: 1 10kW, 3 80V Narrow V-band: ZDY200-3.1 5- I (Coiled Tube Cooling)	2BEX 353-0BG3-472
			Motor: 1 10kW, 3 80V Reducer: ZDY200-3.1 5- I (Coiled Tube Cooling)	2BEX 353-0BG3-472
		Reducer	Motor: 1 10kW, 3 80V Reducer: ZDY200-3.1 5- I (Coiled Tube Cooling)	2BEX 353-0BG3-472
	500	Belt	Motor: 1 32kW, 3 80V Narrow V-band: SPC4000	2BEX 353-0BV3-500
	530	Belt	Motor: 1 32kW, 3 80V Narrow V-band: SPC4000	2BEX 353-0BV3-530
		Reducer	Motor: 1 32kW, 3 80V Reducer: ZDY200-2.8 - I (Coiled Tube Cooling)	2BEX 353-0BG3-530
			Motor: 1 32kW, 3 80V, d II BT4 Reducer: ZDY200-2.8 - I (Coiled Tube Cooling)	2BEX 353-0BG3-530
		Reducer	Motor: 1 32kW, 3 80V Reducer: ZDY200-2.8 - I (Coiled Tube Cooling)	2BEX 353-0BG3-530
	590	Belt	Motor: 1 60kW, 3 80V Narrow V-band: SPC4000	2BEX 353-0BV3-590

Model	Rotating Speed (r/min)	Transmission Mode	Unit Configuration	Unit Code
2BEX 353-0	590	Direct	Motor: 1 60kW, 3 80V	2BEX 353-0BD3-590
			Motor: 1 60kW, 3 80V, d II BT4	2BEX 353-0BD3-590
		Reducer	Motor : 1 60kW, 3 80V Reducer : ZDY200-2.5 - I (Coiled Tube Cooling)	2BEX 353-0BG3-590
		Reducer	Motor: 1 60kW, 3 80V, d II BT4 Reducer: ZDY200-2.5 - I (Coiled Tube Cooling)	2BEX 353-0BD3-590
2BEX 355-1	372	Belt	Motor: 9 0kW, 3 80V Narrow V-band: SPC4000	2BEX 355-1BV3-372
	472	Reducer	Motor: 1 10kW, 3 80V Reducer: ZDY200-3.15 - I (Coiled Tube Cooling)	2BEX 355-1BG3-472
		Reducer	Motor: 1 10kW, 3 80V, d II BT4 Reducer: ZDY200-3.15 - I (Coiled Tube Cooling)	2BEX 355-1BG3-472
	500	Belt	Motor: 1 32kW, 3 80V Narrow V-band: SPC400	2BEX 355-1BV3-500
			Motor: 1 32kW, 3 80V Narrow V-band: SPC4000	2BEX 355-1BV3-500
	590	Reducer	Motor: 1 60kW, 3 80V Reducer: ZDY200-2.5 - I (Coiled Tube Cooling)	2BEX 355-1BG3-590
			Motor: 1 60kW, 3 80V, d II BT4 Reducer: ZDY200-2.5 - I (Coiled Tube Cooling)	2BEX 355-1BG3-590
		Direct	Motor: 1 60kW, 3 80V	2BEX 355-1BD3-590
			Motor: 1 60kW, 3 80V, d II BT4	2BEX 355-1BD3-590
2BEX 403-0	330	Reducer	Motor: 1 10kW, 3 80V Reducer: ZDY250-4.5 - I (Coiled Tube Cooling)	2BEX 403-0BG3-330
			Motor: 1 10kW, 3 80V, d II BT4 Reducer: ZDY250-4.5 - I (Coiled Tube Cooling)	2BEX 403-0BG3-330
		Belt	Motor: 1 10kW, 3 80V Narrow V-band: SPC5600	2BEX 403-0BV3-330
	372	Reducer	Motor: 1 32kW, 3 80V Reducer: ZDY280-4 - I (Coiled Tube Cooling)	2BEX 403-0BG3-372
			Motor: 1 32kW, 3 80V, d II BT4 Reducer: ZDY280-4 - I (Coiled Tube Cooling)	2BEX 403-0BG3-372
		Belt	Motor: 1 32kW, 3 80V Narrow V-band: SPC5600	2BEX 403-0BV3-372
			Motor: 1 32kW, 3 80V Narrow V-band: SPC5600	2BEX 403-0BV3-372
	420	Reducer	Motor: 1 60kW, 3 80V Reducer: ZDY250-3.55 - I (Coiled Tube Cooling)	2BEX 403-0BG3-420
			Motor: 1 60kW, 3 80V, d II BT4 Reducer: ZDY250-3.55 - I (Coiled Tube Cooling)	2BEX 403-0BG3-420

Model	Rotating Speed (r/min)	Transmission Mode	Unit Configuration	Unit Code
2BEX 403-0	420	Belt	Motor: 1 60kW, 3 80V Narrow V-band: SPC5600	2BEX 403-0BV3-420
	472	Reducer	Motor: 1 85kW, 3 80V Reducer: ZDY250-3.15-I (Coiled Tube Cooling)	2BEX 403-0BG3-472
			Motor: 1 85kW, 3 80V, d II BT4 Reducer: ZDY250-3.15-I (Coiled Tube Cooling)	2BEX 403-0BG3-472
		Belt	Motor: 1 85kW, 3 80V Narrow V-band: SPC5600	2BEX 403-0BV3-472
2BEX 405-1	330	Reducer	Motor: 1 32kW, 3 80V Reducer: ZDY250-4.5-I (Coiled Tube Cooling)	2BEX 405-1BG3-330
			Motor: 1 32kW, 3 80V, d II BT4 Reducer: ZDY250-4.5-I (Coiled Tube Cooling)	2BEX 405-1BG3-330
		Belt	Motor: 1 32kW, 3 80V Narrow V-band: SPC5600	2BEX 405-1BV3-330
	372	Reducer	Motor: 1 60kW, 3 80V Reducer: ZDY250-4-I (Coiled Tube Cooling)	2BEX 405-1BG3-372
			Motor: 1 60kW, 3 80V, d II BT4 Reducer: ZDY250-4-I (Coiled Tube Cooling)	2BEX 405-1BG3-372
		Belt	Motor: 1 60kW, 3 80V Narrow V-band: SPC5600	2BEX 405-1BV3-372
	420	Reducer	Motor: 1 85kW, 3 80V Reducer: ZDY250-3.55-I (Coiled Tube Cooling)	2BEX 405-1BG3-420
			Motor: 1 85kW, 3 80V, d II BT4 Reducer: ZDY250-3.55-I (Coiled Tube Cooling)	2BEX 405-1BG3-420
		Belt	Motor: 1 85kW, 3 80V Narrow V-band: SPC5600	2BEX 405-1BV3-420
	472	Reducer	Motor: 2 00kW, 3 80V Reducer: ZDY250-3.15-I (Coiled Tube Cooling)	2BEX 405-1BG3-472
		Belt	Motor: 2 00kW, 3 80V Narrow V-band: SPC5600	2BEX 405-1BV3-472
2BEX 503-0	266	Reducer	Motor: 1 32kW, 3 80V, d II BT4 Reducer: ZDY280-5.6-I (Coiled Tube Cooling)	2BEX 503-0BG3-266
			Motor: 1 32kW, 3 80V Reducer: ZDY280-5.6-I (Coiled Tube Cooling)	2BEX 503-0BG3-266
			Motor: 1 32kW, 3 80V Reducer: ZDY280-5.6-I (Coiled Tube Cooling)	2BEX 503-0BG3-266
	298	Reducer	Motor: 1 60kW, 3 80V Reducer: ZDY280-5-I (Coiled Tube Cooling)	2BEX 503-0BG3-298
			Motor: 1 60kW, 3 80V, d II BT4 Reducer: ZDY280-5-I (Coiled Tube Cooling)	2BEX 503-0BG3-298
			Motor: 1 60kW, 3 80V, d II BT4 Reducer: ZDY280-5-I (Coiled Tube Cooling)	2BEX 503-0BG3-298

Model	Rotating Speed (r/min)	Transmission Mode	Unit Configuration	Unit Code
2BEX 503-0	298	Reducer	Motor: 1 60kW, 3 80V Reducer: ZDY280-5 - I (Coiled Tube Cooling)	2BEX 503-0BG3-298
	330	Reducer	Motor: 1 85kW, 3 80V, d II BT4 Reducer: ZDY315-4 .5 - I (Coiled Tube Cooling)	2BEX 503-0BG3-330
			Motor: 1 85kW, 3 80V Reducer: ZDY315-4 .5 - I (Coiled Tube Cooling)	2BEX 503-0BG3-330
			Motor: 1 85kW, 3 80V Reducer: ZDY315-4 .5 - I (Coiled Tube Cooling)	2BEX 503-0BG3-330
	372	Reducer	Motor: 2 20kW, 3 80V Reducer: ZDY315-4 - I (Coiled Tube Cooling)	2BEX 503-0BG3-372
			Motor: 2 20kW, 3 80V Reducer: ZDY315-4 - I (Coiled Tube Cooling)	2BEX 503-0BG3-372
			Motor: 2 20kW, 3 80V, d II BT4 Reducer: ZDY315-4 - I (Coiled Tube Cooling)	2BEX 503-0BG3-372
2BEX 505-1	266	Reducer	Motor: 1 60kW, 3 80V Reducer: ZDY315-5 .6 - I (Coiled Tube Cooling)	2BEX 505-1BG3-266
			Motor: 1 60kW, 3 80V Reducer: ZDY315-5 .6 - I (Coiled Tube Cooling)	2BEX 505-1BG3-266
			Motor: 1 60kW, 3 80V, d II BT4 Reducer: ZDY315-5 .6 - I (Coiled Tube Cooling)	2BEX 505-1BG3-266
	298	Reducer	Motor: 1 85kW, 3 80V Reducer: ZDY315-5 - I (Coiled Tube Cooling)	2BEX 505-1BG3-298
			Motor: 1 85kW, 3 80V, d II BT4 Reducer: ZDY315-5 - I (Coiled Tube Cooling)	2BEX 505-1BG3-298
			Motor: 1 85kW, 3 80V Reducer: ZDY315-5 - I (Coiled Tube Cooling)	2BEX 505-1BG3-298
	330	Reducer	Motor: 2 20kW, 3 80V Reducer: ZDY315-4 .5 - I (Coiled Tube Cooling)	2BEX 505-1BG3-330
			Motor: 2 20kW, 3 80V, d II BT4 Reducer: ZDY315-4 .5 - I (Coiled Tube Cooling)	2BEX 505-1BG3-330
			Motor: 2 20kW, 3 80V Reducer: ZDY315-4 .5 - I	2BEX 505-1BG3-330
			Motor: 2 20kW, 6 000V Reducer: ZDY315-4 .5 - I (Coiled Tube Cooling)	2BEX 505-1BG3-330
			Motor: 2 20kW, 6 000V Reducer: ZDY315-4 .5 - I (Coiled Tube Cooling)	2BEX 505-1BG3-330
	372	Reducer	Motor: 2 50kW, 3 80V Reducer: ZDY315-4 - I (Coiled Tube Cooling)	2BEX 505-1BG3-372
			Motor: 2 50kW, 3 80V Reducer: ZDY315-4 - I (Coiled Tube Cooling)	2BEX 505-1BG3-372

Model	Rotating Speed (r/min)	Transmission Mode	Unit Configuration	Unit Code
2BEX 505-1	372	Reducer	Motor: 2 50kW、3 80V、d II BT4 Reducer: ZDY315-4 - I (Coiled Tube Cooling)	2BEX 505-1BG3-372
			Motor: 2 50kW、6 000V Reducer: ZDY315-4 - I (Coiled Tube Cooling)	2BEX 505-1BG3-372
			Motor: 2 50kW、1 0KV Reducer: ZDY315-4 - I (Coiled Tube Cooling)	2BEX 505-1BG3-372
			Motor: 2 50kW、1 0KV Reducer: ZDY360-4 - II (Coiled Tube Cooling)	2BEX 505-1BG3-372
2BEX 603-0	236	Reducer	Motor: 2 20kW、3 80V Reducer: ZDY315-6 .3 - I (Coiled Tube Cooling)	2BEX 603-0BG3-236
			Motor: 2 20kW、3 80V、d II BT4 Reducer: ZDY315-6 .3 - I (Coiled Tube Cooling)	2BEX 603-0BG3-236
	266	Reducer	Motor: 2 50kW、3 80V Reducer: ZDY315-5 .6 - I (Coiled Tube Cooling)	2BEX 603-0BG3-266
			Motor: 2 50kW、3 80V、d II BT4 Reducer: ZDY315-5 .6 - I (Coiled Tube Cooling)	2BEX 603-0BG3-266
			Motor: 2 50kW、3 80V Reducer: ZDY315-5 .6 - I (Coiled Tube Cooling)	2BEX 603-0BG3-266
	298	Reducer	Motor: 2 80kW、3 80V Reducer: ZDY315-5 - I (Coiled Tube Cooling)	2BEX 603-0BG3-298
			Motor: 2 80kW、3 80V、d II BT4 Reducer: ZDY315-5 - I (Coiled Tube Cooling)	2BEX 603-0BG3-298
			Motor: 2 80kW、3 80V Reducer: ZDY315-5 - I (Coiled Tube Cooling)	2BEX 603-0BG3-298
	2BEX 605-1	236	Reducer	Motor: 2 20kW、3 80V Reducer: ZDY355-6 .3 - I (Coiled Tube Cooling)
Motor: 2 20kW、6 000V Reducer: ZDY355-6 .3 - I (Coiled Tube Cooling)				2BEX 605-1BG3-236
Motor: 2 20kW、6 000V Reducer: ZDY355-6 .3 - I (Coiled Tube Cooling)				2BEX 605-1BG3-236
266		Reducer	Motor: 2 80kW、3 80V Reducer: ZDY355-5 .6 - I (Coiled Tube Cooling)	2BEX 605-1BG3-266
			Motor: 2 80kW、6 000V Reducer: ZDY355-5 .6 - I (Coiled Tube Cooling)	2BEX 605-1BG3-266
			Motor: 2 80kW、6 000V Reducer: ZDY355-5 .6 - I (Coiled Tube Cooling)	2BEX 605-1BG3-266
298		Reducer	Motor: 3 15kW、3 80V Reducer: ZDY355-5 - I (Coiled Tube Cooling)	2BEX 605-1BG3-298
			Motor: 3 15kW、6 000V Reducer: ZDY355-5 - I (Coiled Tube Cooling)	2BEX 605-1BG3-298

Model	Rotating Speed (r/min)	Transmission Mode	Unit Configuration	Unit Code
2BEX 605-1	298	Reducer	Motor: 3 15kW, 6 000V Reducer: ZDY355-5 - I (Coiled Tube Cooling)	2BEX 605-1BG3-298
2BEX 703-0	197	Reducer	Motor: 3 15kW, 6 000V Reducer: ZDY400-5 - I (Coiled Tube Cooling)	2BEX 703-0BG3-197
			Motor: 3 15kW, 6 000V Reducer: ZDY400-5 - I (Coiled Tube Cooling)	2BEX 703-0BG3-197
	210	Reducer	Motor: 3 55kW, 6 000V Reducer: ZDY400-4 .5 - I (Coiled Tube Cooling)	2BEX 703-0BG3-210
			Motor: 3 55kW, 6 000V Reducer: ZDY400-4 .5 - I (Coiled Tube Cooling)	2BEX 703-0BG3-210
	236	Reducer	Motor: 4 00kW, 6 000V Reducer: ZDY400-4 - I (Coiled Tube Cooling)	2BEX 703-0BG3-236
			Motor: 4 00kW, 6 000V Reducer: ZDY400-4 - I (Coiled Tube Cooling)	2BEX 703-0BG3-236
2BEX 705-1	266	Reducer	Motor: 4 50kW, 6 000V Reducer: ZDY400-5 .6 - I (Coiled Tube Cooling)	2BEX 703-0BG3-266
			Motor: 4 50kW, 6 000V Reducer: ZDY400-5 .6 - I (Coiled Tube Cooling)	2BEX 703-0BG3-266
	210	Reducer	Motor: 4 00kW, 6 000V Reducer: ZDY400-3 .55 - I (Coiled Tube Cooling)	2BEX 705-1BG3-210
	236	Reducer	Motor: 4 50kW, 6 000V Reducer: ZDY400-3 .15 - I (Coiled Tube Cooling)	2BEX 705-1BG3-236
	266	Reducer	Motor: 5 00kW, 6 000V Reducer: ZDY400-2 .8 - I (Coiled Tube Cooling)	2BEX 705-1BG3-266

Notice:

1、2BEX water ring vacuum pump, each variety has a variety of speed, material can be selected, the same speed and different transmission supporting form, the table above only lists part of the supporting form, for the user to select the type of reference;

2、The motor supporting power in the table above can meet the vacuum pump in the full suction range of work, such as vacuum pump can be fixed at a certain point or a certain section of inhalation pressure work, but also according to the actual shaft power of the work point configuration motor, motor power may be less than the power in the table;

3、If the vacuum pump discharge pressure is higher than atmospheric pressure, according to operating conditions, motor power may be increased;

4、2BEX series water ring compressor parameters please refer to 21 to 32 pages 2BEX series water ring compressor performance curve;

5、The requirements of explosion-proof belt transmission motive group, must be equipped with anti-static belt;

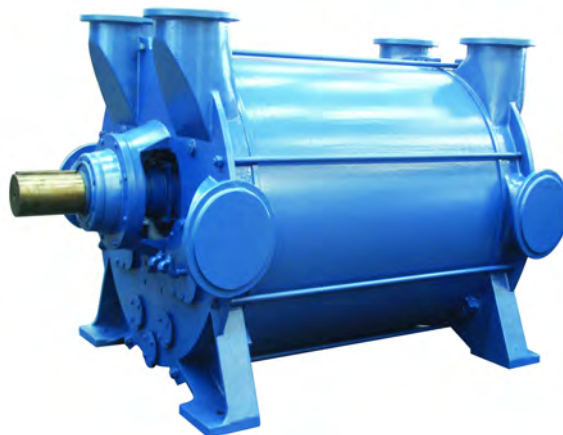
6、2BEX356-1, 2BEX406-1, 2BEX506-1 Casing belt spacer plate, both sides of the pump can work under different suction pressure. Speed, supporting form, form of installation size and 2BEX355-1, 2BEX405-1, 2BEX505-1, respectively;

7、Interface flange standard GB/T9119-2010 PN10.

2BEK Series Water Ring Vacuum Pump and Compressor

Overview

2BEK series water ring vacuum pump is a new generation of energy-efficient products developed by Shanghai KaiQuan Pump Industry (Group) Co., Ltd. Commonly used to pump gases that do not contain solid particles, are insoluble, or are slightly soluble in the working fluid. The working fluid is generally warm and clear water.



Product Feature

The energy saving effect is significant

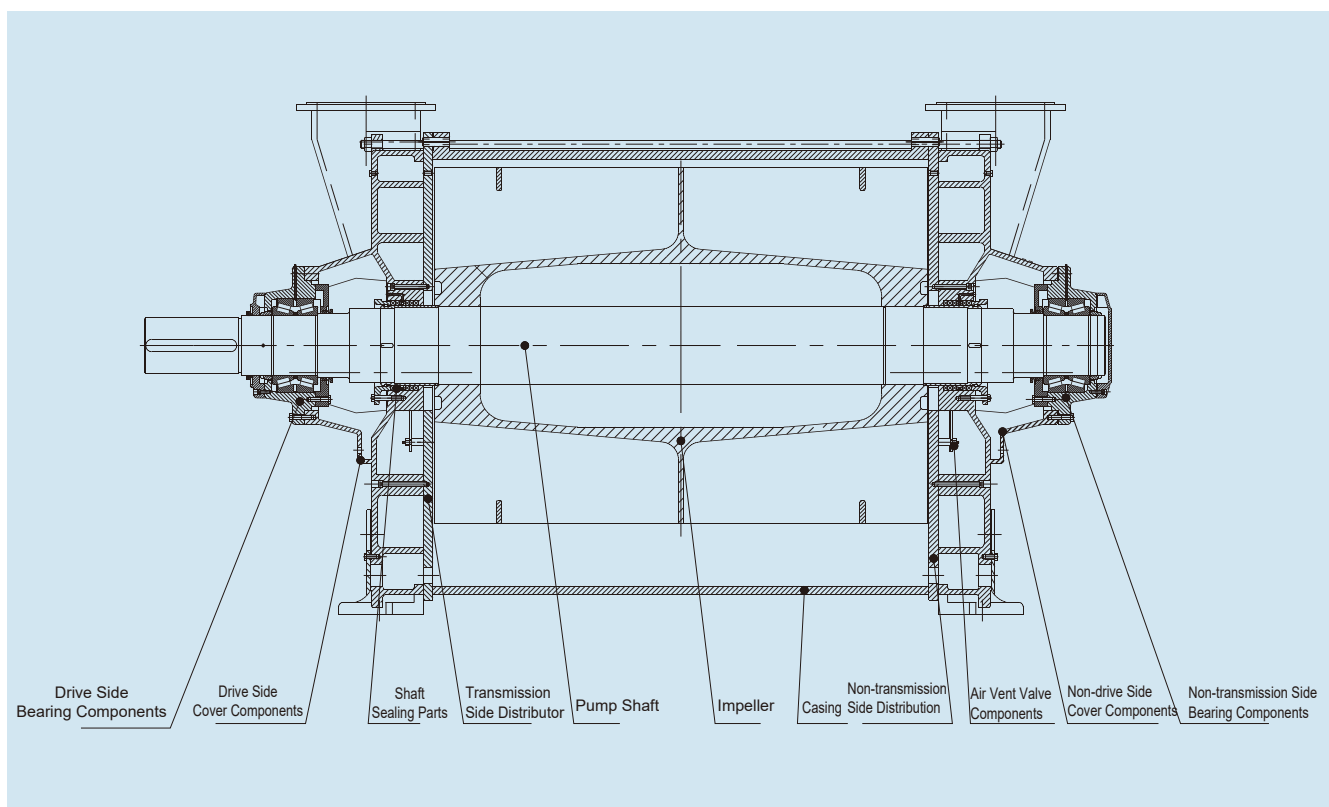
The optimized hydraulic model design greatly improves the operating efficiency of the pump in the 160-1013 hPa area, so it is more energy efficient and energy efficient.

Run smoothly, High reliability

With an optimized hydraulic design, the impulsion uses a large aspect ratio to give the pump a lower line speed than other series of pumps when obtaining the same amount of pumping. At the same time, the simple structure design makes the operation of the pump more smooth and reliable, the noise is lower.

Structural Advantages are Outstanding

- 1、Single-stage single-acting horizontal structure, simple and reliable, easy to maintain.
- 2、With horizontal and vertical exhaust port, easy to use the user process.
- 3、Equipped with an automatic drain valve, control the starting fluid level of the pump to avoid overload start-up.
- 4、The rotor clearance adjustment mechanism can accurately guarantee the gap between the impeller end face and the dispenser surface, thus ensuring the performance of the pump and the safe operation of the pump without friction.
- 5、The exhaust port with flexible valve plate automatically adjusts the exhaust angle so that the pump can operate efficiently in different inhalation states.
- 6、Impeller strengthens the ring to move away from the end face, prevents impurities from retention, and reduces the impact of fouling on the pump.
- 7、The side cover has an inspection service hole open, so that the overflow parts and valve plate components can be easily checked without disassembling the pump.
- 8、Bearings with large carrying capacity of two-row conical roller bearings, strengthen the structural design of key parts, so that the pump can adapt to load impact fluctuations and other adverse operating conditions. When equipped with a heat exchanger, the working fluid can be recycled, reducing the loss of water. Through the self-absorption function of the vacuum pump, the cooled work fluid is introduced into the pump without the need for additional boosters.
- 9、Using the casing structure with partition, a pump can be adapted to the use requirements of two different operating conditions.



Strong Adaptability

In order to meet different anti-corrosion requirements, overflow components can be manufactured in the corresponding stainless steel material.

Overflow components are coated with polymer anti-corrosion coatings to meet strong corrosion requirements. The shaft seal has filler seal and various mechanical sealing options to meet different operating conditions.

A variety of transmission methods form a variety of supporting forms, such as motor direct transmission, belt wheel transmission, reducer transmission and so on.

Product standard: JB/T7255

Application

Products are widely used in papermaking, cigarettes, pharmaceuticals, sugar, textile, food, metallurgy, mineral processing, mining, coal washing, fertilizer, refining, chemical industrial sectors such as power and electronics.

Power industry: negative pressure ash removal, flue gas desulfurization

Mining industry: gas extraction (vacuum pump and tank gas and water separator), vacuum filtration, vacuum flotation

Petrochemicals: gas recovery, vacuum distillation, vacuum crystallization

Paper industry: vacuum moisture dehydration (front tank gas and water separator and vacuum pump)

Air-to-air division: variable pressure adsorption vacuum system in the tobacco industry

The Model Represents Method

For example: 2BEK400-2BG3-350

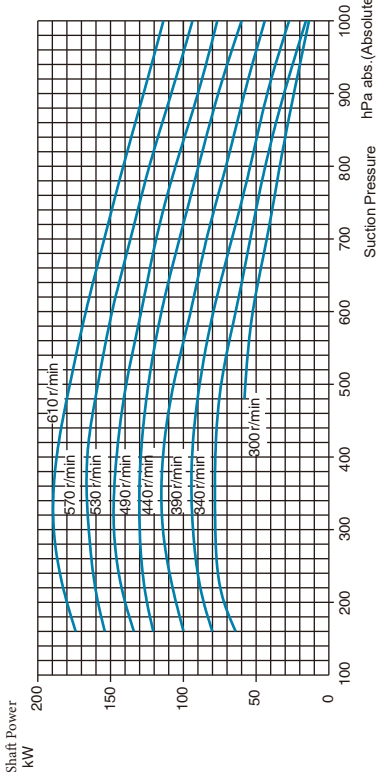
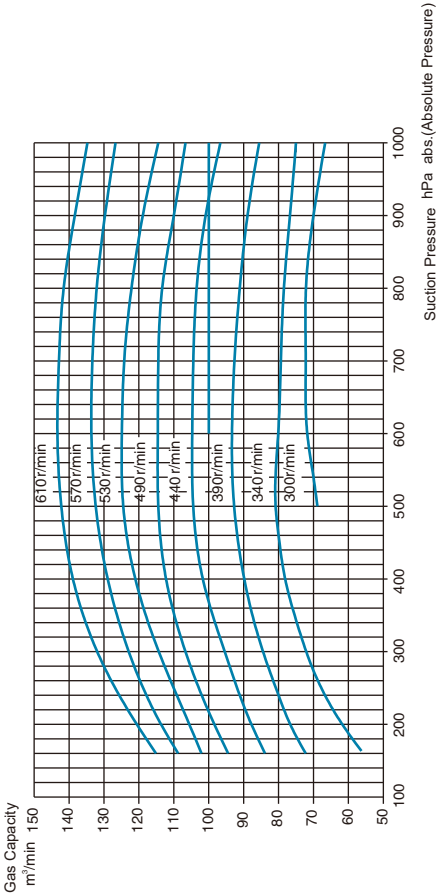
2BEK	Vacuum Pump Series number				
	400	Pump specification code			
		2	Pump minimum suction absolute pressure 160hPa		
			B	Casing, impeller, dispenser material is cast iron carbon steel	
			E	Casing, impeller, dispenser material is 304	
			H	Casing, impeller, dispenser material is 316	
			F	Casing, impeller, dispenser material is 316L	
			M	Other materials	
				D	Direct transmission of motor
				V	Belt drive
				G	Reducer drive
					3 External water supply filler seal
					4 Internal water supply filler seal
					5 Single-sided internal water supply mechanical seal
					6 Single-sided external water supply mechanical seal
					7 Double-sided machine seal
					350 Pump Rotating speed

Material Selection Table

2BEK Pump Material Selection Table		
Name	General Configuration	Optional Materials
Impeller	QT400(2BEK400-520Casting) Q235B(2BEK620-1120Welding)	304、316, etc
Casing	Q235B	304、316, etc
Distributor	Q235B Steel Plate	304、316, etc
Side Cover	HT200	304、316, etc
Shaft	45	2Cr13、40Cr, etc
Sleeve	304	316, etc
Bearing	Domestic	NSK、SKF, etc

2BEK Series Water Ring Vacuum Pump Performance Curve

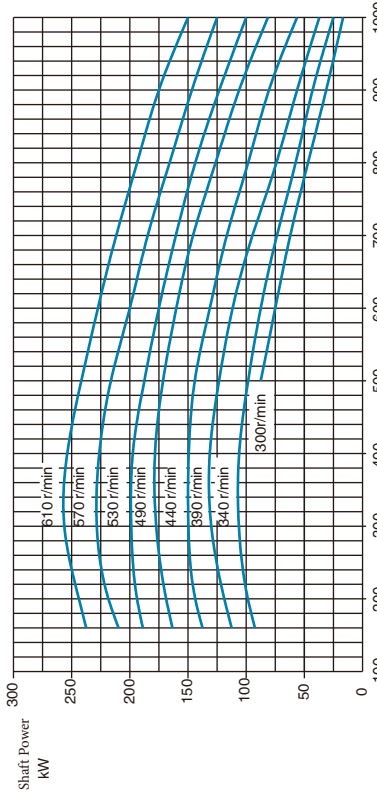
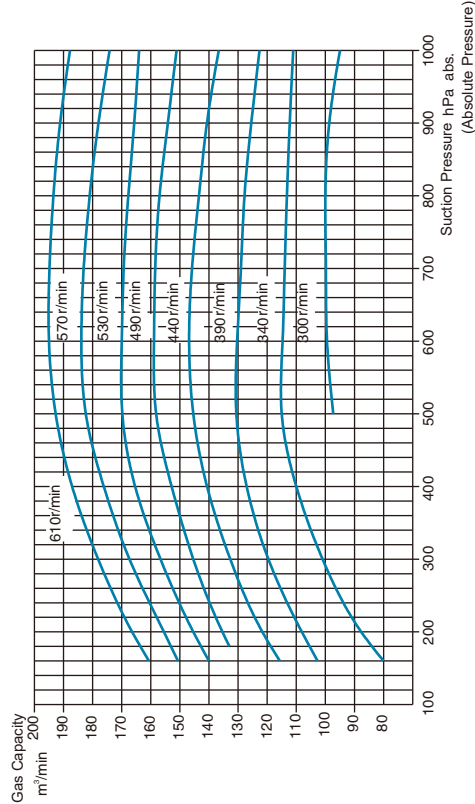
2BEK 400 water ring vacuum pump performance curve



Notice: The image above shows a suction temperature of 20°C, a working fluid temperature of 15°C, and an exhaust pressure of a standard atmospheric pressure (1013.25hPa), the performance curve of the pump when the medium is suctioned as saturated air. The working fluid (water) capacity under different suction pressures

Suction Pressure hPa	200	250	300	350	400	450	500	550	600	650	700	750	800
Working Fluid Capacity m³/h	9.4	9.7	9.9	9.5	9	8.7	7.8	7.5	6.6	6	5.4	4.7	4.2

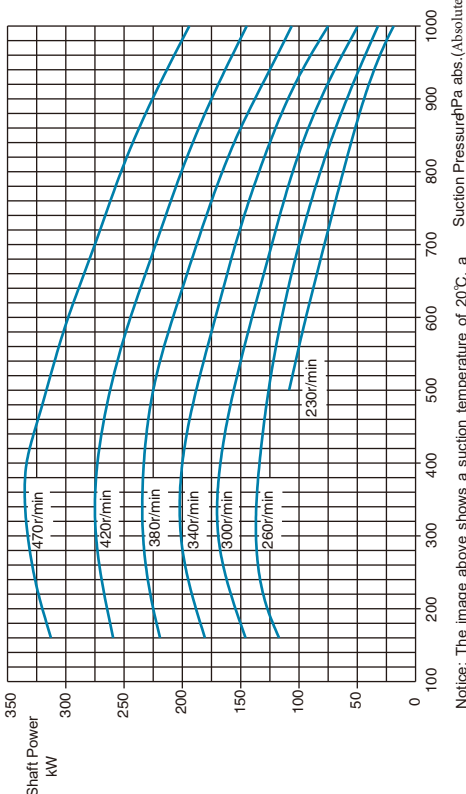
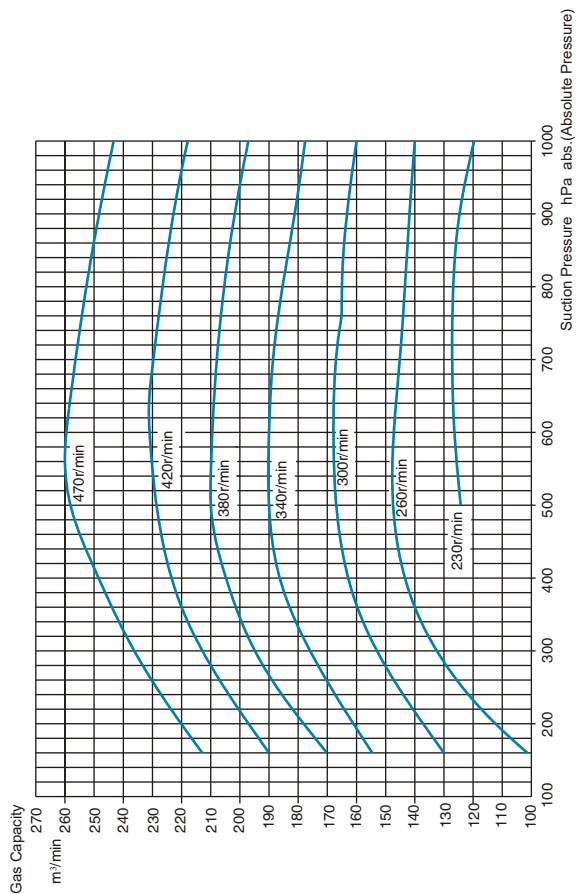
2BEK 420 water ring vacuum pump performance curve



Notice: The image above shows a suction temperature of 20°C, a working fluid temperature of 15°C, and an exhaust pressure of a standard atmospheric pressure (1013.25hPa), the performance curve of the pump when the medium is suctioned as saturated air. The working fluid (water) capacity under different suction pressures

Suction Pressure hPa	200	250	300	350	400	450	500	550	600	650	700	750	800
Working Fluid Capacity m³/h	12.8	13.2	13.5	12.9	12.3	11.5	10.7	9.7	8.6	7.2	6.4	5.8	5.3

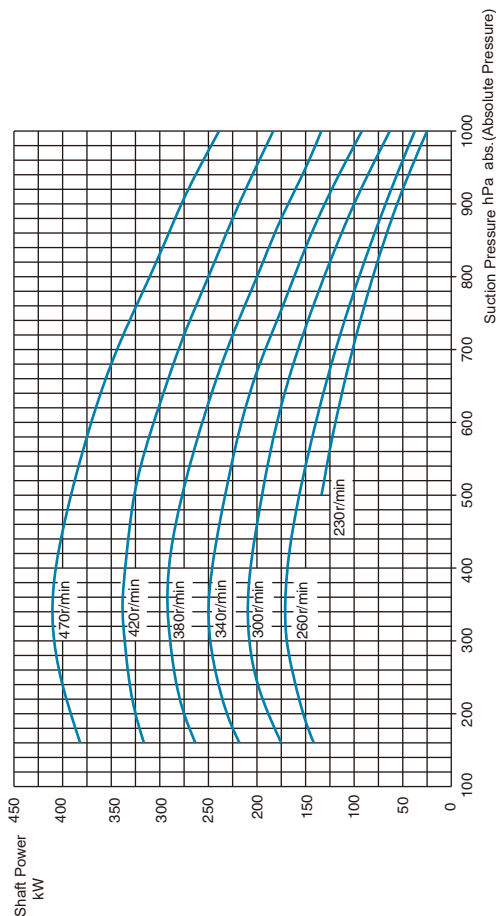
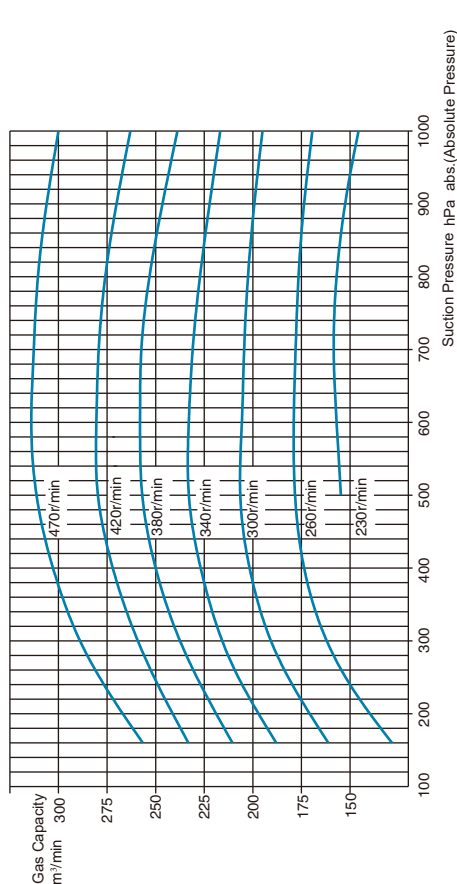
2BEK 500 water ring vacuum pump performance curve



Notice: The image above shows a suction temperature of 20°C, a working fluid temperature of 15°C, and an exhaust pressure of a standard atmospheric pressure (1013.25hPa), the performance curve of the pump when the medium is suctioned as saturated air. The working fluid (water) capacity under different suction pressures

Suction Pressure hPa	200	250	300	350	400	450	500	550	600	650	700	750	800
Working Fluid Capacity m³/min	17.4	17.7	18.3	17.2	16.6	15.4	14.4	13.2	12.1	11.0	9.9	8.9	7.8

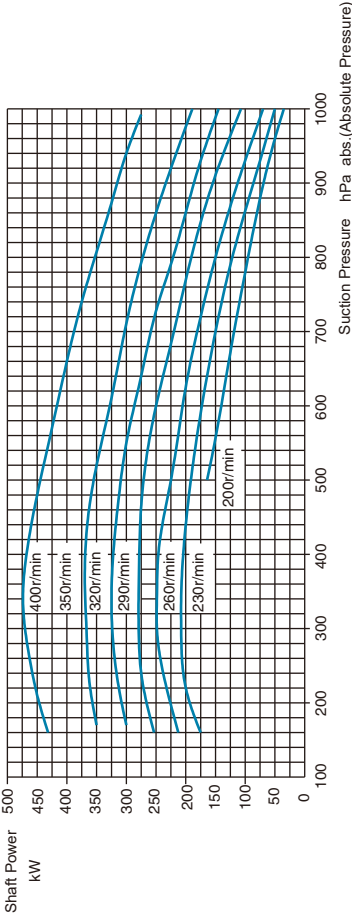
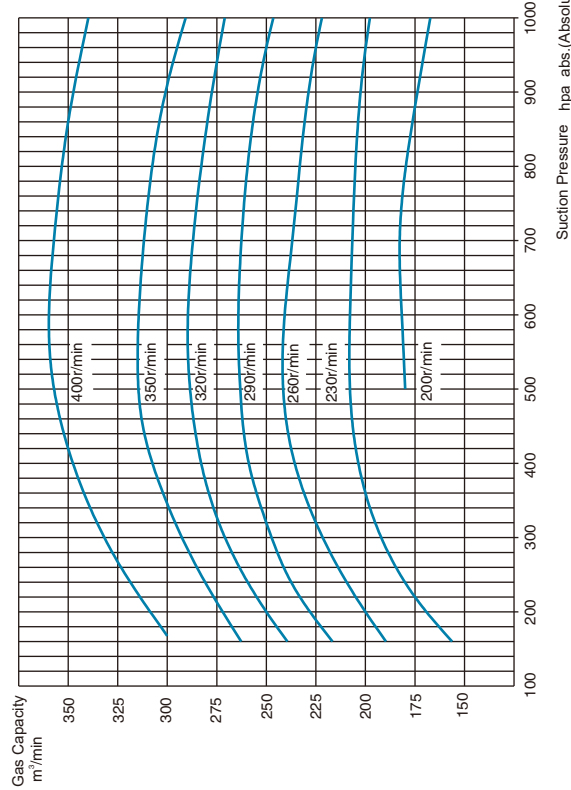
2BEK 520 water ring vacuum pump performance curve



Notice: The image above shows a suction temperature of 20°C, a working fluid temperature of 15°C, and an exhaust pressure of a standard atmospheric pressure (1013.25hPa), the performance curve of the pump when the medium is suctioned as saturated air. The working fluid (water) capacity under different suction pressures

Suction Pressure hPa	200	250	300	350	400	450	500	550	600	650	700	750	800
Working Fluid Capacity m³/min	21.1	21.6	22.2	21.2	20.2	18.9	17.6	16.1	14.8	13.4	12.0	10.7	9.5

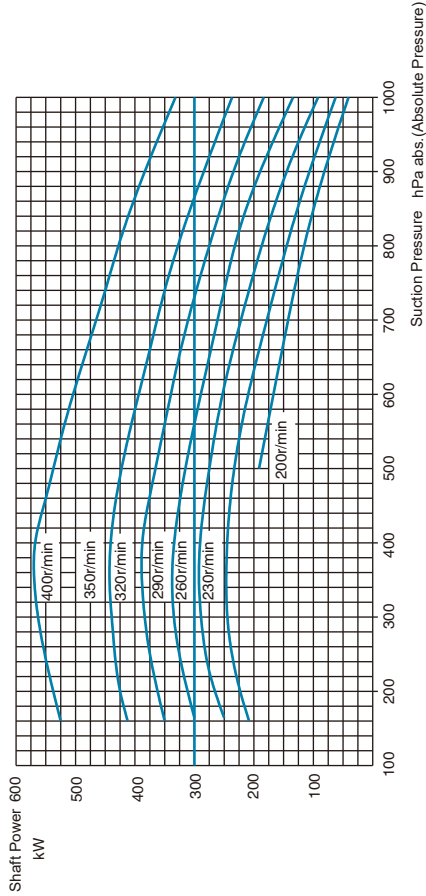
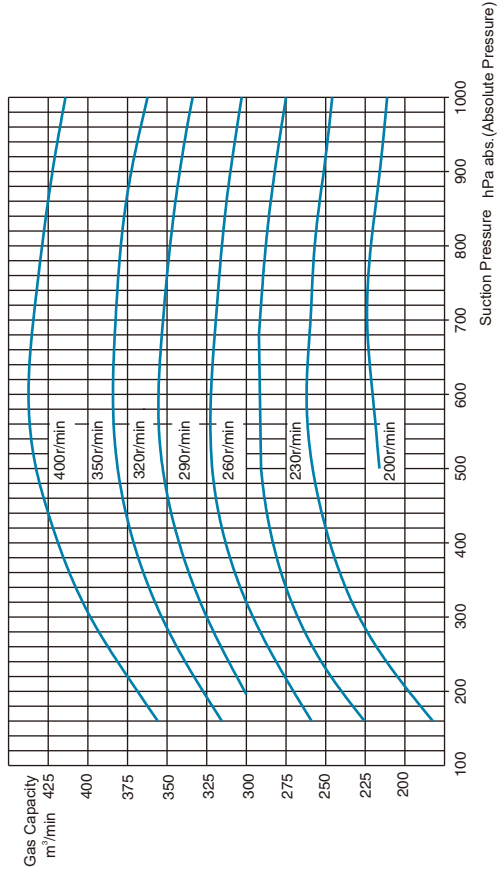
2BEK 600 water ring vacuum pump performance curve



Notice: The image above shows a suction temperature of 20℃, a working fluid temperature of 15℃, and an exhaust pressure of a standard atmospheric pressure (1013. 25hPa), the performance curve of the pump when the medium is suctioned as saturated air. The working fluid (water) capacity under different suction pressures

Suction Pressure hPa	200	250	300	350	400	450	500	550	600	650	700	750	800
Working Fluid Capacity m³/h	24.1	24.7	25.4	24.2	23.0	21.5	20.1	18.4	16.9	15.3	13.7	12.2	10.8

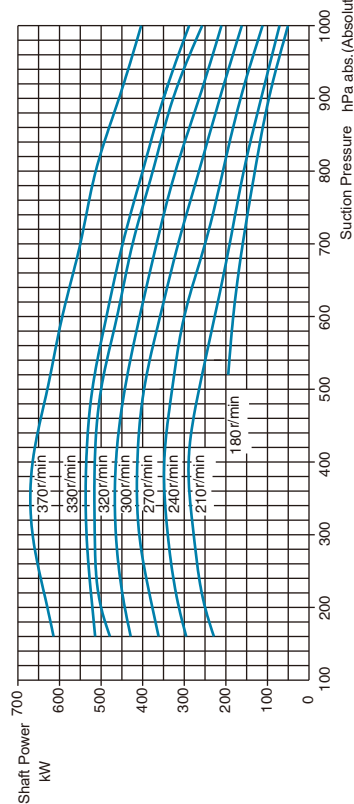
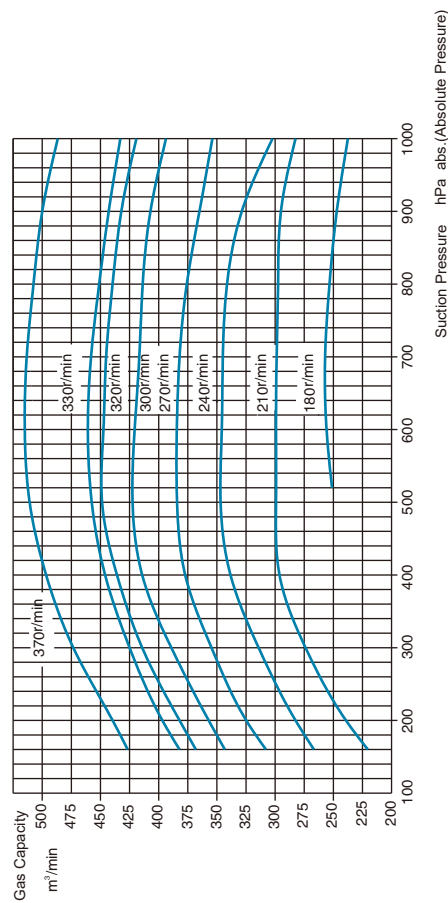
2BEK 620 water ring vacuum pump performance curve



Notice: The image above shows a suction temperature of 20℃, a working fluid temperature of 15℃, and an exhaust pressure of a standard atmospheric pressure (1013. 25hPa), the performance curve of the pump when the medium is suctioned as saturated air. The working fluid (water) capacity under different suction pressures

Suction Pressure hPa	200	250	300	350	400	450	500	550	600	650	700	750	800
Working Fluid Capacity m³/h	29.4	30.1	30.9	29.3	28.0	26.1	24.4	22.3	20.5	18.6	16.7	14.9	13.2

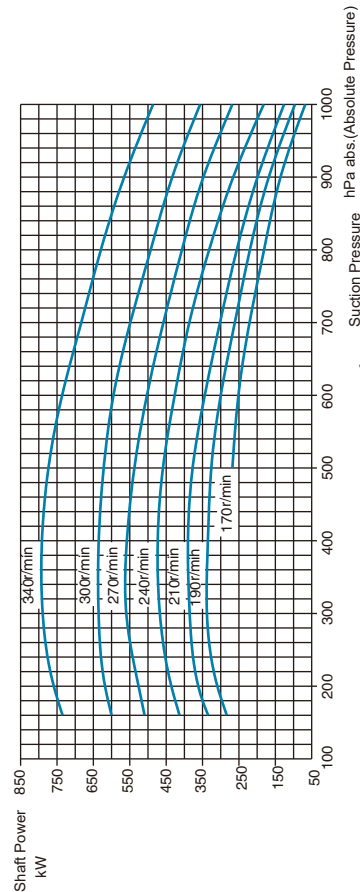
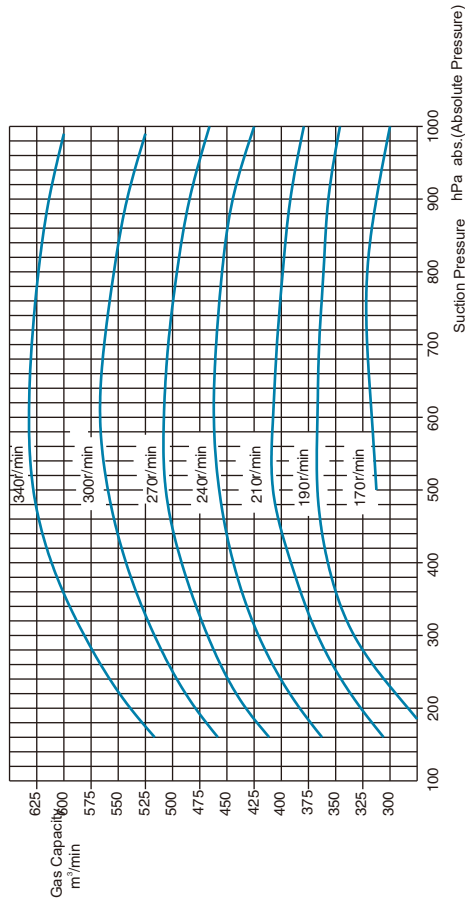
2BEK 670 water ring vacuum pump performance curve



Notice: The image above shows a suction temperature of 20°C, a working fluid temperature of 15°C, and an exhaust pressure of a standard atmospheric pressure (1013.25hPa), the performance curve of the pump when the medium is suctioned as saturated air. The working fluid (water) capacity under different suction pressures

Suction Pressure hPa	200	250	300	350	400	450	500	550	600	650	700	750	800
Working Fluid Capacity m^3/h	34.6	35.5	36.4	36.4	33.0	30.7	28.7	26.3	24.1	21.8	19.7	17.6	15.5

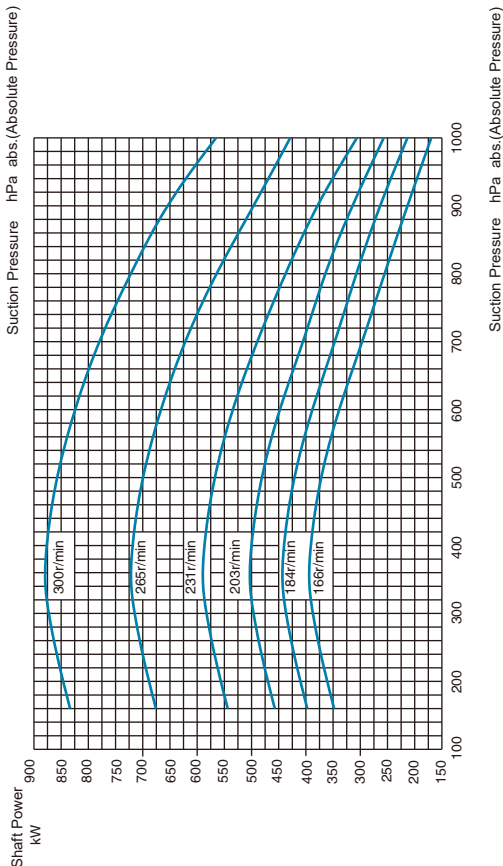
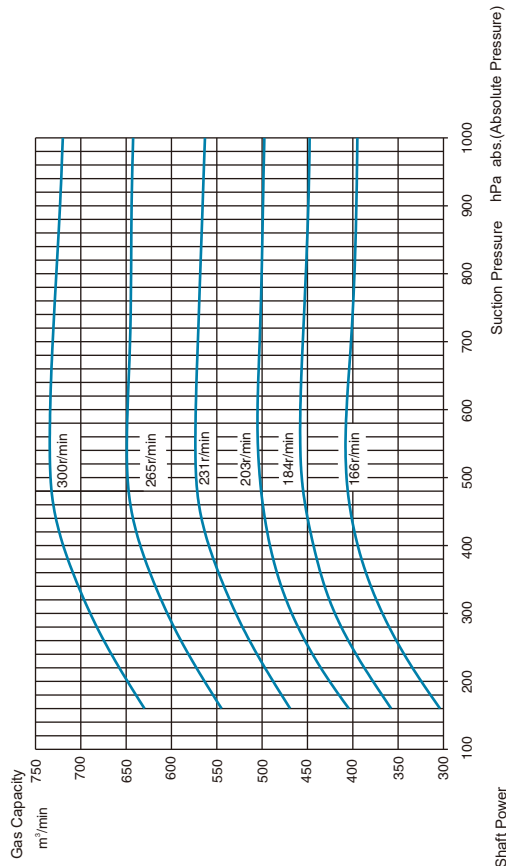
2BEK 720 water ring vacuum pump performance curve



Notice: The image above shows a suction temperature of 20°C, a working fluid temperature of 15°C, and an exhaust pressure of a standard atmospheric pressure (1013.25hPa), the performance curve of the pump when the medium is suctioned as saturated air. The working fluid (water) capacity under different suction pressures

Suction Pressure hPa	200	250	300	350	400	450	500	550	600	650	700	750	800
Working Fluid Capacity m^3/h	41.3	42.2	42.2	43.5	41.4	39.4	36.7	34.3	28.8	26.2	23.7	21.1	18.6

2BEK 800 water ring vacuum pump performance curve

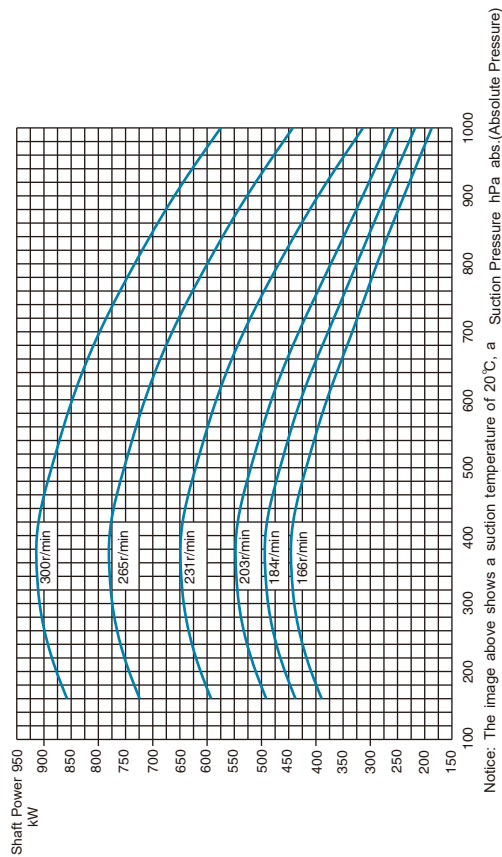
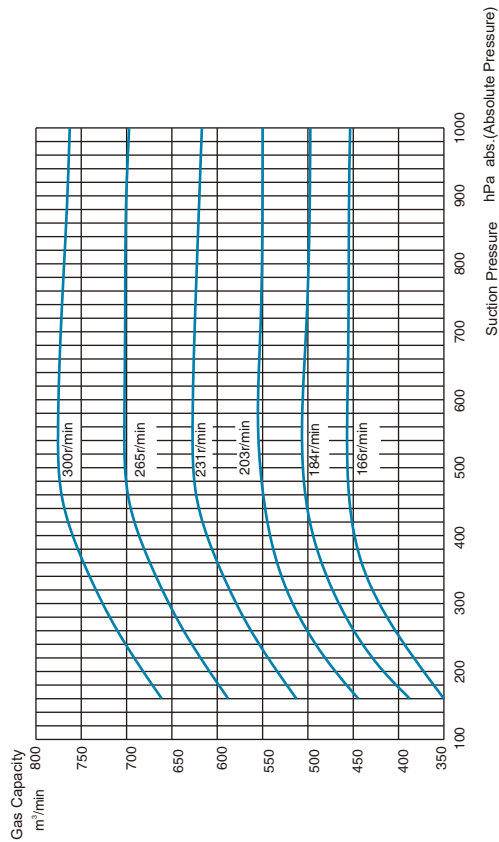


Notice: The image above shows a suction temperature of 20℃, a working fluid temperature of 15℃, and an exhaust pressure of a standard atmospheric pressure (1013. 25hPa), the performance curve of the pump when the medium is suctioned as saturated air.

The working fluid (water) capacity under different suction pressures

Suction Pressure hPa	200	250	300	350	400	450	500	550	600	650	700	750	800
Working Fluid Capacity m³/h	56.5	57.9	59.5	56.7	53.9	50.4	47.1	43.1	39.6	35.8	32	28.6	25.3

2BEK820 water ring vacuum pump performance curve

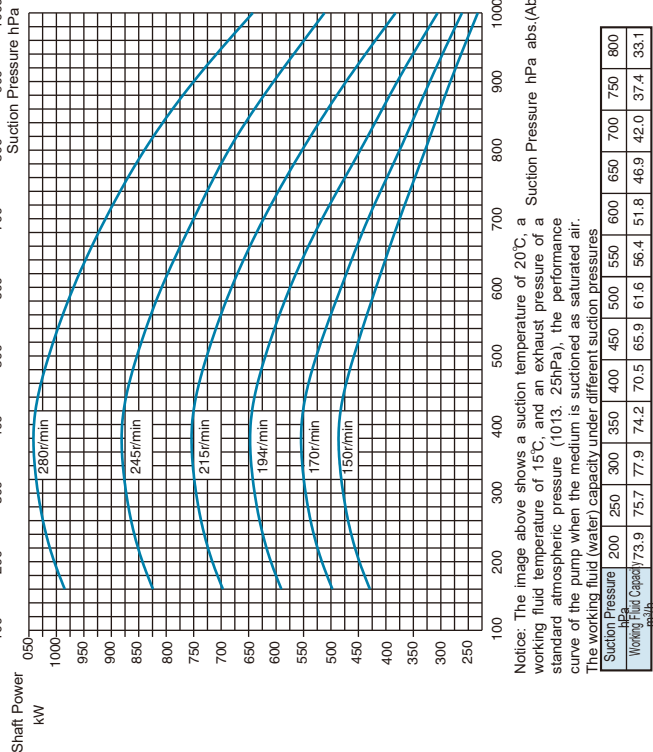
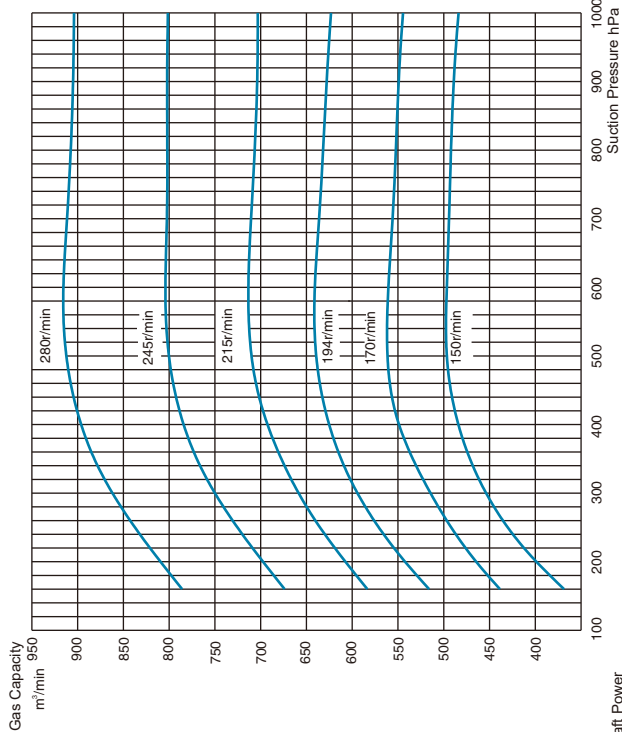


Notice: The image above shows a suction temperature of 20℃, a working fluid temperature of 15℃, and an exhaust pressure of a standard atmospheric pressure (1013. 25hPa), the performance curve of the pump when the medium is suctioned as saturated air.

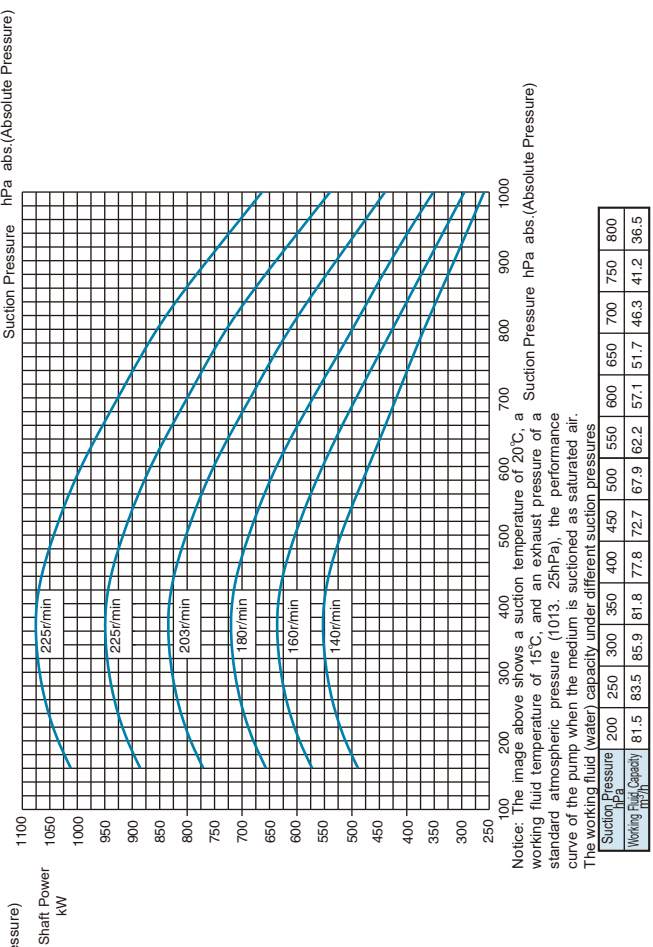
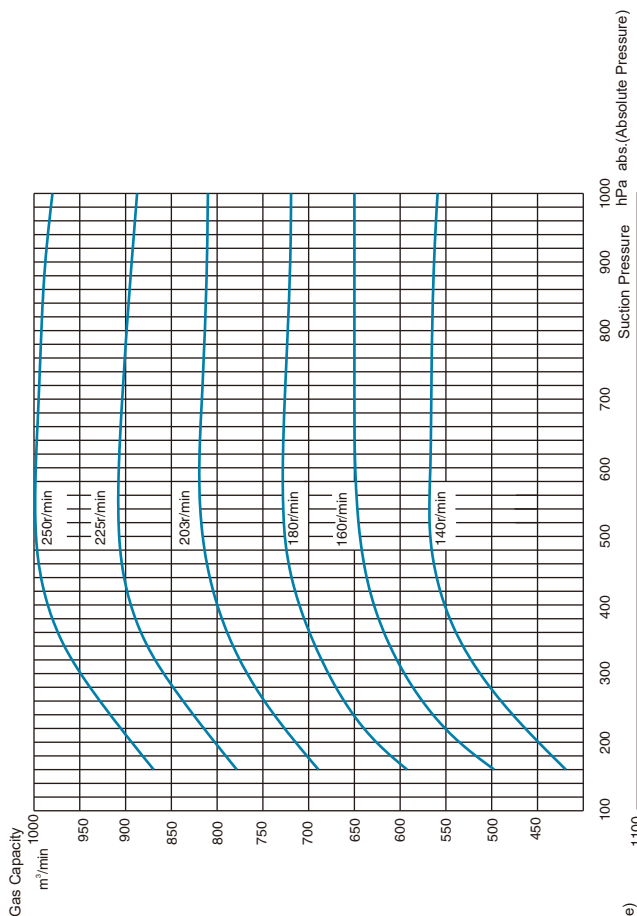
The working fluid (water) capacity under different suction pressures

Suction Pressure hPa	200	250	300	350	400	450	500	550	600	650	700	750	800
Working Fluid Capacity m³/h	64.2	65.8	67.7	64.5	61.3	57.3	53.5	49.1	45.1	40.8	36.5	32.5	28.8

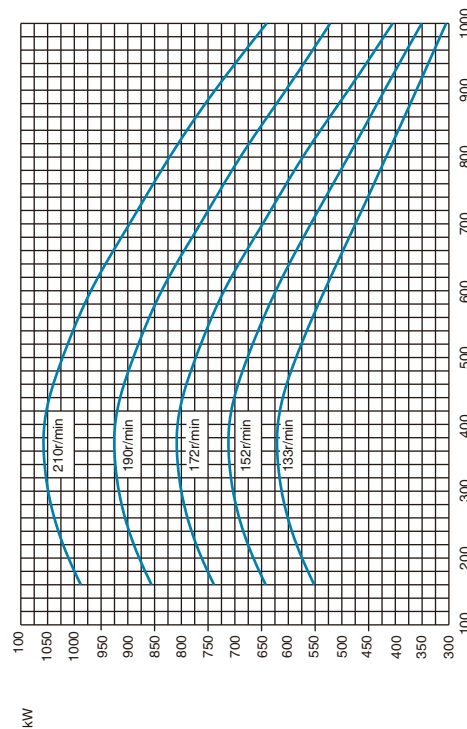
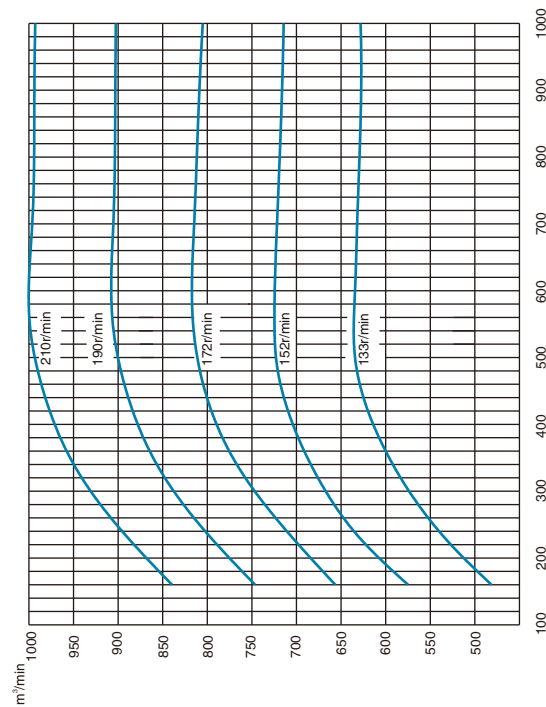
2BEK 860 water ring vacuum pump performance curve



2BEK 920 water ring vacuum pump performance curve



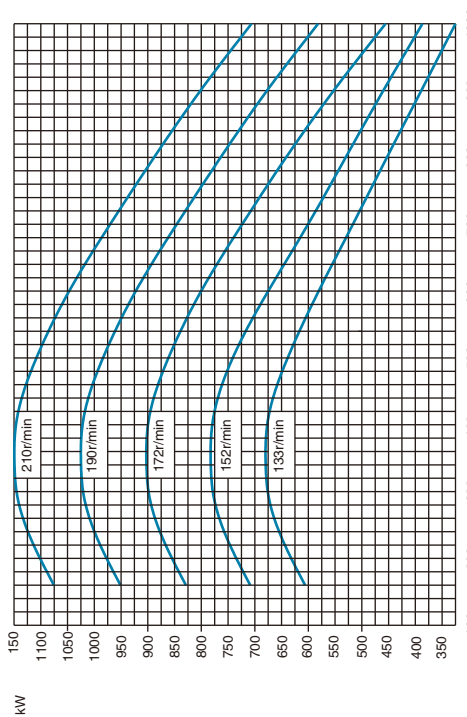
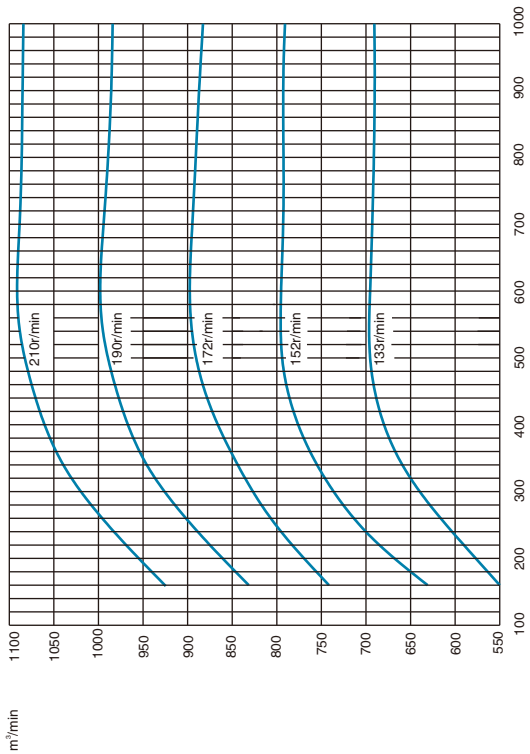
2BEK1000 water ring vacuum pump performance curve



Notice: The image above shows a suction temperature of 20°C, a working fluid temperature of 15°C, and an exhaust pressure of a standard atmospheric pressure (1013.25hPa), the performance curve of the pump when the medium is suctioned as saturated air. The working fluid (water) capacity under different suction pressures

Suction Pressure hPa	200	250	300	350	400	450	500	550	600	650	700	750	800
Working Fluid Capacity m³/min	92.1	94.4	97.1	92.5	87.9	82.1	76.8	70.3	64.6	58.5	52.3	46.6	41.3

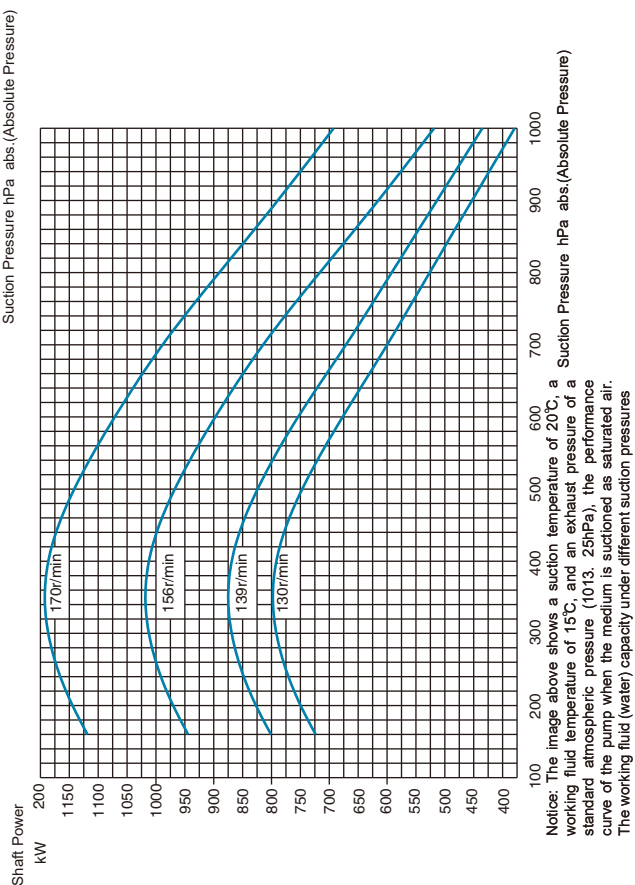
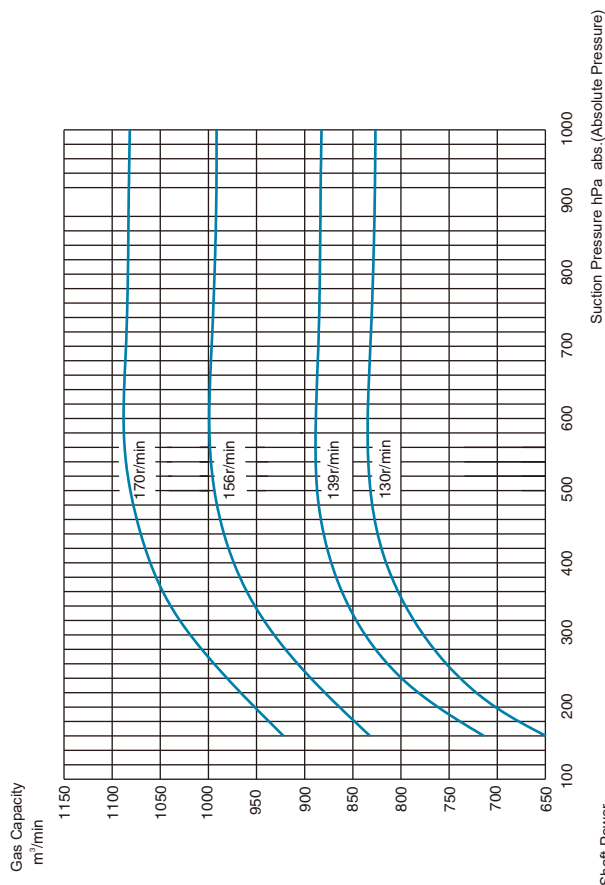
2BEK1020 water ring vacuum pump performance curve



Notice: The image above shows a suction temperature of 20°C, a working fluid temperature of 15°C, and an exhaust pressure of a standard atmospheric pressure (1013.25hPa), the performance curve of the pump when the medium is suctioned as saturated air. The working fluid (water) capacity under different suction pressures

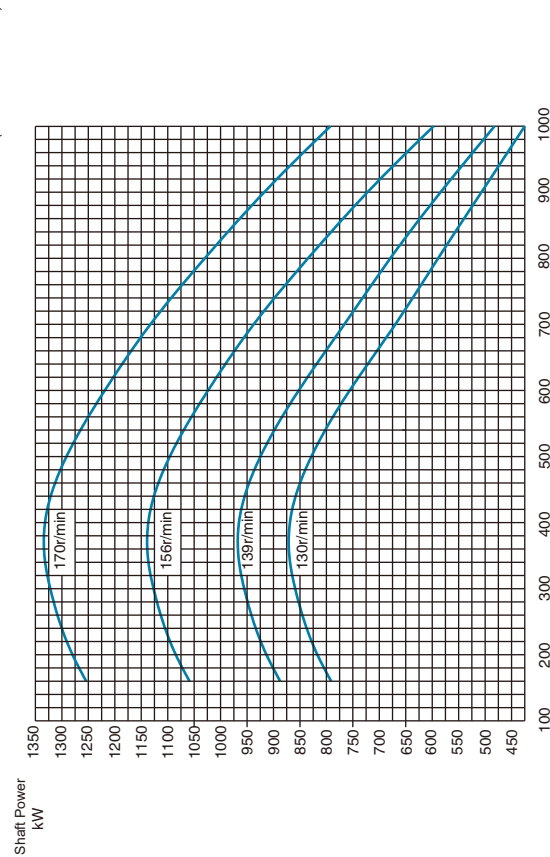
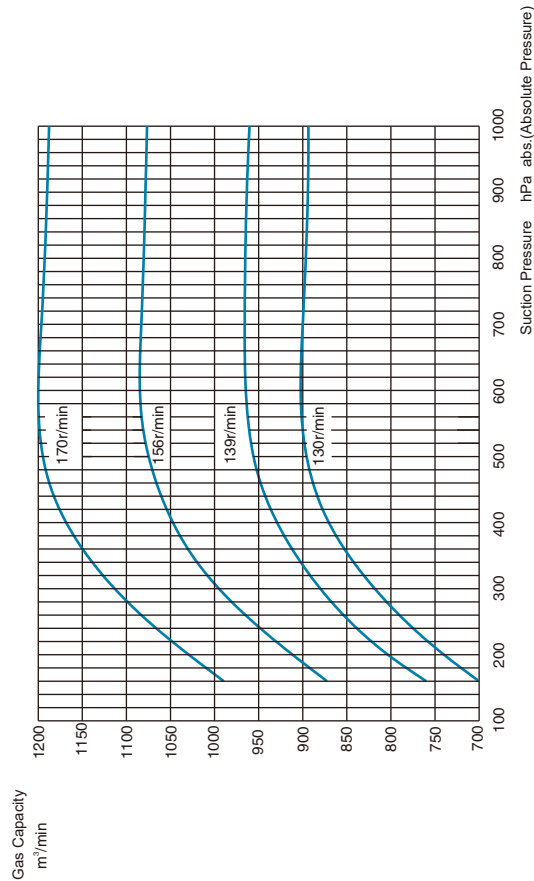
Suction Pressure hPa	200	250	300	350	400	450	500	550	600	650	700	750	800
Working Fluid Capacity m³/min	101.3	103.8	106.7	101.7	96.7	90.4	84.5	77.3	71	64.3	57.6	51.3	45.4

2BEK 1100 water ring vacuum pump performance curve



Suction Pressure hPa	200	250	300	350	400	450	500	550	600	650	700	750	800
Working Fluid Capacity m ³ /h	110.5	113.2	116.5	110.9	105.4	98.6	92.1	84.4	77.5	70.1	62.8	55.9	49.5

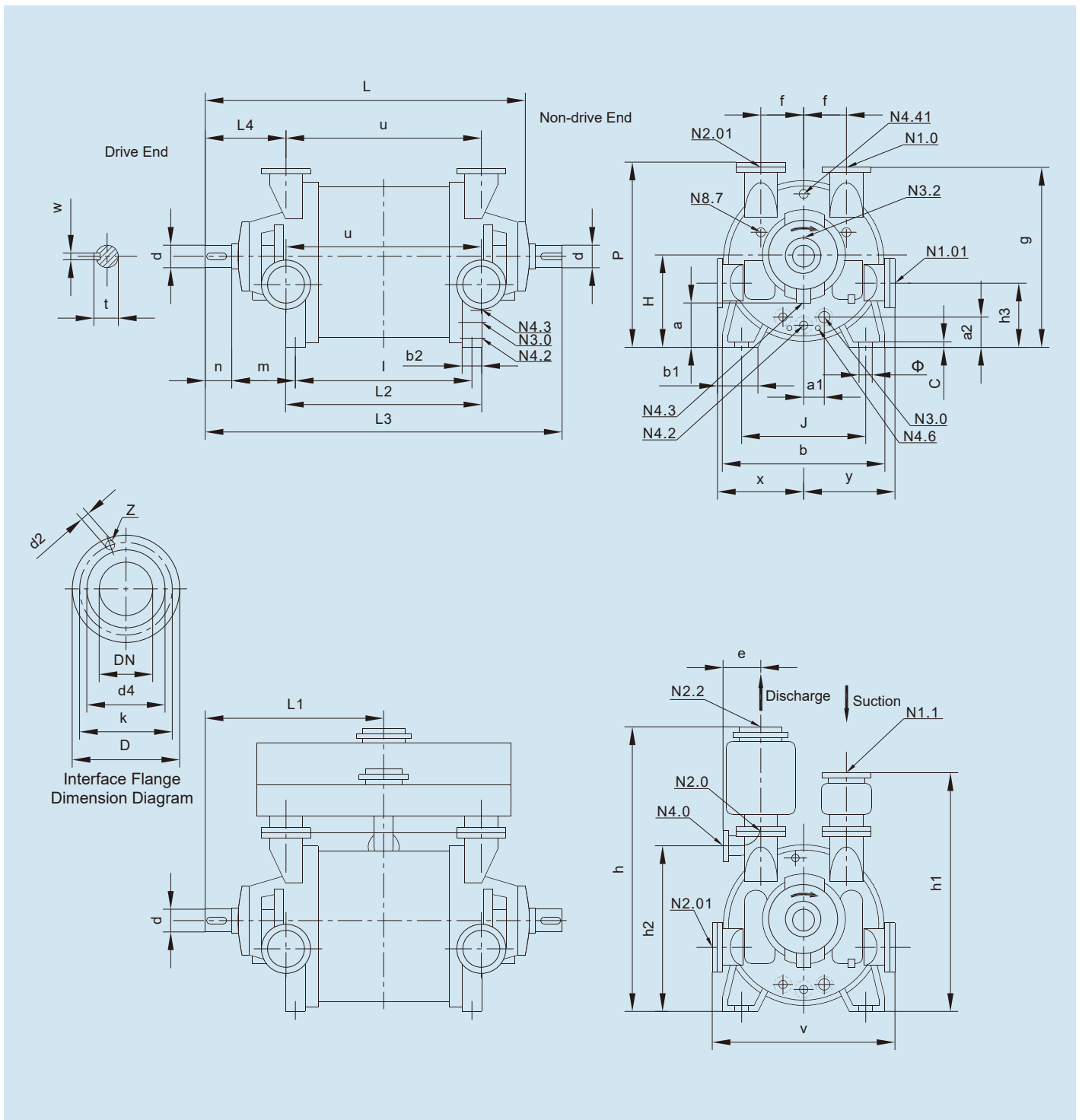
2BEK 1120 water ring vacuum pump performance curve



Notice: The image above shows a suction temperature of 20°C, a working fluid temperature of 15°C, and an exhaust pressure of a standard atmospheric pressure (1013.25hPa), the performance curve of the pump when the medium is suctioned as saturated air. The working fluid (water) capacity under different suction pressures

Suction Pressure hPa	200	250	300	350	400	450	500	550	600	650	700	750	800
Working Fluid Capacity m ³ /h	119.2	122.1	125.6	119.7	113.7	106.3	99.4	91	83.6	75.6	67.8	60.3	53.4

2BEX Series Water Ring Vacuum Pump Installation Size



Model	N1.0/1.01(Inlet Flange)						N1.1(Connecting Pipe Flange)						N2.0/2.01(Outlet Flange)					
	DN	d2	d4	D	K	Z	DN	d2	d4	D	K	Z	DN	d2	d4	D	K	Z
2BEK400/420	250	22	319	345	350	12	300	22	370	445	400	12	250	22	319	395	350	12
2BEK500/520	300	22	370	445	400	12	350	22	430	505	460	16	300	22	370	445	400	12
2BEK600/620	350	22	430	505	460	16	400	26	482	565	515	16	350	22	430	505	460	16
2BEK670	350	22	430	505	460	16	500	26	585	670	620	20	350	22	430	505	460	16
2BEK720	400	26	482	565	515	16	500	26	585	670	620	20	400	26	482	565	515	16
2BEK800/820	400	26	480	565	515	16	500	26	582	670	620	20	400	26	482	565	515	16
2BEK860	450	26	530	615	565	20	500	26	582	670	620	20	450	26	530	615	565	20
2BEK920	500	26	582	670	620	20	600	30	682	780	725	20	500	26	582	670	620	20
2BEK1000/1020	600	30	682	780	725	20	700	26	772	860	810	24	600	30	682	780	725	20
2BEK1100/1120	600	30	682	780	725	20	700	26	772	860	810	24	600	30	682	780	725	20
Model	N2.2(Separator Outlet Flange)						N3.0(Working Fluid Interface)						N4.0(Separator Drain)					
	DN	d2	d4	D	K	Z	DN	d2	d4	D	K	Z	DN	d2	d4	D	K	Z
2BEK400/420	300	22	370	450	405	12	50	M12	102	—	80	4	150	22	210	280	240	8
2BEK500/520	350	22	430	505	460	16	50	M12	102	—	80	4	200	22	268	340	295	8
2BEK600/620	400	26	482	565	515	16	80	M12	135	—	112	4	200	22	268	340	295	8
2BEK670	500	26	585	670	620	20	80	M12	135	—	112	4	200	22	268	340	295	8
2BEK720	500	26	585	670	620	20	80	M12	585	—	112	4	200	22	320	395	350	12
2BEK800/820	500	26	582	670	620	20	100	18	156	—	180	8	250	22	319	395	350	12
2BEK860	500	26	582	670	620	20	100	18	156	—	180	8	250	22	319	395	350	12
2BEK920	600	30	682	780	725	20	100	18	156	—	180	8	250	22	319	395	350	12
2BEK1000/1020	700	26	772	860	810	24	150	22	211	—	240	8	300	22	370	445	400	12
2BEK1100/1120	700	26	772	860	810	24	150	22	211	—	240	8	300	22	370	445	400	12
Model	N4.2(Flushing and Drain)						N3.2		N4.3		N4.41		N4.6		N8.7			
	DN	d2	d4	D	K	Z	(The Sealing Fluid Interface of the Stuffing Box)		(Leakage Fluid Outlet)		(Flush Discharge Liquid in Standby Machine Seal)		(Screwed Plug of the Total Discharge Outlet)		(Instrument Screwed Plug)			
2BEK400/420	50	M12	102	—	80	4	G1/4 ”		G3/4 ”		G1/2 ”		G1/2 ”		G1/2 ”			
2BEK500/520	50	M12	102	—	80	4	G1/4 ”		G3/4 ”		G1/2 ”		G1/2 ”		G1/2 ”			
2BEK600/620	80	M12	135	—	112	4	G1/2 ”		G3/4 ”		G1/2 ”		G1/2 ”		G1/2 ”			
2BEK670	80	M12	135	—	112	4	G1/2 ”		G3/4 ”		G1/2 ”		G1/2 ”		G1/2 ”			
2BEK720	80	M12	135	—	112	4	G1/2 ”		G3/4 ”		G1/2 ”		G1/2 ”		G1/2 ”			
2BEK800/820	80	M16	132	—	160	8	G1/2 ”		G3/4 ”		G1 ”		G1 ”		G1/2 ”			
2BEK860	80	M16	132	—	160	8	G1 ”		G1 ”		G1 ”		G1 ”		G1/2 ”			
2BEK920	100	M16	156	—	180	8	G1 ”		G1 ”		G1 ”		G1 ”		G1/2 ”			
2BEK1000/1020	100	M16	156	—	180	8	G1 ”		G1 ”		G1 ”		G1 ”		G1/2 ”			
2BEK1100/1120	100	M16	156	—	180	8	G1 ”		G11/2 ”		G1 ”		G1 ”		G1/2 ”			

Model	a	a1	a2	b	b1	b2	c	d	e	f	g	H	h	h1	h2	h3	l	J
2BEK400	332	160	209	1090	215	200	30	Φ130	280	300	1160	620	1810	1640	1035	560	1103	875
2BEK420	332	160	209	1090	215	200	30	Φ130	280	300	1160	620	1810	1640	1035	560	1392	875
2BEK500	451	175	227	1320	250	250	35	Φ160	367	385	1450	775	2235	1970	1253	698	1490	1120
2BEK520	451	175	227	1320	250	250	35	Φ160	367	385	1450	775	2235	1970	1253	698	1740	1120
2BEK600	539	200	249	1620	300	300	45	Φ180	367	435	1720	900	2610	2290	1524	809	1747	1320
2BEK620	539	200	249	1620	300	300	45	Φ180	367	435	1720	900	2610	2290	1524	809	2042	1320
2BEK670	576	200	291	1860	320	300	45	Φ200	367	460	1855	975	2800	2430	1661	877	2184	1560
2BEK720	663	200	291	1900	340	340	45	Φ200	449	490	1985	1060	3040	2620	1755	952	2375	1600
2BEK800	760	230	306	2180	390	390	50	Φ200	449	560	2274	1214	3392	3192	1986	1090	2586	1790
2BEK820	760	230	306	2180	390	390	50	Φ200	449	560	2274	1214	3392	3192	1986	1090	2746	1790
2BEK860	817	247	330	2345	417	427	56	Φ245	449	605	2430	1311	3625	3210	2050	1177	2981	1975
2BEK920	865	265	350	2500	445	445	60	Φ260	449	645	2610	1392	3840	3520	2131	1250	3137	2100
2BEK1000	930	280	379	2672	476	509	60	Φ270	500	690	2770	1492	4225	3721	2355	1340	3263	2195
2BEK1020	930	280	379	2672	476	509	60	Φ270	500	690	2770	1492	4225	3721	2355	1340	3463	2195
2BEK1100	1045	315	425	2995	533	570	68	Φ280	500	773	3105	1673	4560	4056	2690	1503	3991	2460
2BEK1120	1045	315	425	2995	533	570	68	Φ280	500	773	3105	1673	4560	4056	2690	1503	3991	2460

Model	L	L1	L2	L3	L4	m	n	p	Φ	t	u	v	w	x	y
2BEK400	2080	1145	1274	2290	561	394	250	1195	42	137	1169	1320	32	625	660
2BEK420	2369	1290	1563	2579	561	394	250	1195	42	137	1458	1320	32	625	660
2BEK500	2630	1456	1723	2913	672	439	300	1490	42	169	1568	1580	40	750	790
2BEK520	2853	1581	1973	3163	672	439	300	1490	42	169	1818	1580	40	750	790
2BEK600	2837	1572	2043	3144	650	442	300	1760	48	190	1841	1572	45	875	915
2BEK620	3132	1719	2338	3439	650	442	300	1760	48	190	2138	1830	45	875	915
2BEK670	3389	1873	2480	3748	733	486	350	1900	48	210	2280	1960	45	935	980
2BEK720	3587	1972	2730	3946	733	465	350	2030	48	210	2500	2140	45	1025	1070
2BEK800	3872	2099	2976	4194	743	505	300	2306	52	210	2712	2500	45	1226	1250
2BEK820	4032	2179	3136	4354	743	505	300	2306	52	210	2872	2500	45	1226	1250
2BEK860	4215	2232	3381	4507	690	456	285	2460	56	257	3083	2600	56	1287	1300
2BEK920	4806	2653	3583	5312	1025	642	460	2660	56	272	3257	2900	63	1415	1450
2BEK1000	4725	2549	3772	5104	855	572	345	2806	56	282	3388	2962	63	1445	1481
2BEK1020	4925	2649	3972	5304	855	572	345	2806	56	282	3588	2962	63	1445	1481
2BEK1100	5229	2818	4234	5641	915	615	370	3175	56	292	3804	3246	63	1588	1623
2BEK1120	5556	2981	4561	5968	915	615	370	3175	56	292	4131	3246	63	1588	1623

2BEK Series Water Ring Vacuum Pump Configuration Table

Model	Rotating Speed (r/min)	Transmission Mode	Unit Configuration	Unit Code
2BEK400-2	300	Belt	Motor: Y315S-6, 7.5kW, 3 80V Narrow V-band: SPB5000	2BEK400-2BV4-330
		Reducer	Motor: Y280S-4, 7.5kW, 3 80V Reducer: ZDY200-5 -I(Coiled Tube Cooling)	2BEK400-2BG4-330
	340	Belt	Motor: Y315M-6, 9.0kW, 3 80V Narrow V-band: SPB5000	2BEK400-2BV4-340
		Reducer	Motor: Y280M-4, 9.0kW, 3 80V Reducer: ZDY200-4.5 -I(Coiled Tube Cooling)	2BEK400-2BG4-340
	390	Belt	Motor: Y315S-4, 11.0kW, 3 80V Narrow V-band: SPC5000	2BEK400-2BV4-390
		Reducer	Motor: Y315L1-6, 11.0kW, 3 80V Reducer: ZDY200-2.5 -I(Coiled Tube Cooling)	2BEK400-2BG4-390
	440	Belt	Motor: Y315I2-6, 13.2kW, 3 80V Narrow V-band: SPC5000	2BEK400-2BV4-440
		Reducer	Motor: Y315I2-6, 13.2kW, 3 80V Reducer: ZDY250-2.2 4-I(Coiled Tube Cooling)	2BEK400-2BG4-440
	490	Belt	Motor: Y355M1-6, 16.0kW, 3 80V Narrow V-band: SPC5600	2BEK400-2BV4-490
		Reducer	Motor: Y355M1-6, 16.0kW, 3 80V Reducer: ZDY250-2 -I(Coiled Tube Cooling)	2BEK400-2BG4-490
	530	Belt	Motor: Y355M2-6, 18.5kW, 3 80V Narrow V-band: SPC5600	2BEK400-2BV4-530
		Reducer	Motor: Y315M1-4, 18.5kW, 3 80V Reducer: ZDY250-2.8 -I(Coiled Tube Cooling)	2BEK400-2BG4-530
	570	Belt	Motor: Y355M3-6, 22.0kW, 3 80V Narrow V-band: SPC5600	2BEK400-2BV4-570
		Reducer	Motor: Y355M3-6, 22.0kW, 3 80V Reducer: ZDY250-1.8 -I(Coiled Tube Cooling)	2BEK400-2BG4-570
2BEK420-2	300	Belt	Motor: Y315L1-6, 11.0kW, 3 80V Narrow V-band: SPC5000	2BEK420-2BV4-300
		Reducer	Motor: Y315S-4, 11.0kW, 3 80V Reducer: ZDY250-5 -I(Coiled Tube Cooling)	2BEK420-2BG4-300
	340	Belt	Motor: Y315L2-4, 13.2kW, 3 80V Narrow V-band: SPC5000	2BEK420-2BV4-340
		Reducer	Motor: Y315M-4, 13.2kW, 3 80V Reducer: ZDY250-4.5 -I(Coiled Tube Cooling)	2BEK420-2BG4-340

Model	Rotating Speed (r/min)	Transmission Mode	Unit Configuration	Unit Code
2BEK420-2	390	Belt	Motor: Y355M1-6、1 60kW、3 80V Narrow V-band; SPC5600	2BEK420-2BV4-390
		Reducer	Motor: Y355M1-6、1 60kW、3 80V Reducer: ZDY250-2.5-I(Coiled Tube Cooling)	2BEK420-2BG4-390
	440	Belt	Motor: Y355M2-6、1 85kW、3 80V Narrow V-band; SPC5600	2BEK420-2BV4-440
		Reducer	Motor: Y355M2-6、1 85kW、3 80V Reducer: ZDY250-2.24-I(Coiled Tube Cooling)	2BEK420-2BG4-440
	490	Belt	Motor: Y355L1-6、2 20kW、3 80V Narrow V-band; SPC5600	2BEK420-2BV4-490
		Reducer	Motor: Y355L1-6、2 20kW、3 80V Reducer: ZDY280-2-I(Coiled Tube Cooling)	2BEK420-2BG4-490
	530	Belt	Motor: Y355L2-6、2 50kW、3 80V Narrow V-band; SPC5600	2BEK420-2BV4-530
		Reducer	Motor: Y355M2-4、2 50kW、3 80V Reducer: ZDY280-2.8-I(Coiled Tube Cooling)	2BEK420-2BG4-530
	570	Reducer	Motor: Y4002-6、2 80kW、6 kV Reducer: ZDY280-1.8-I(Coiled Tube Cooling)	2BEK420-2BG4-570
	610	Reducer	Motor: Y3556-4、3 15kW、6 kV Reducer: ZDY280-2.5-I(Coiled Tube Cooling)	2BEK420-2BG4-610
2BEK500-2	230	Reducer	Motor: Y355M1-8、1 32kW、3 80V Reducer: ZDY280-3.15-I(Coiled Tube Cooling)	2BEK500-2BG4-230
	260	Reducer	Motor: Y315L1-4、1 60kW、3 80V Reducer: ZDY280-5.6-I(Coiled Tube Cooling)	2BEK500-2BG4-260
	300	Reducer	Motor: Y315L2-4、2 00kW、3 80V Reducer: ZDY280-5-I(Coiled Tube Cooling)	2BEK500-2BG4-300
	340	Reducer	Motor: Y3554-4、2 50kW、6 kV Reducer: ZDY315-4.5-I(Coiled Tube Cooling)	2BEK500-2BG4-340
	380	Reducer	Motor: Y3555-4、2 80kW、6 kV Reducer: ZDY315-4-I(Coiled Tube Cooling)	2BEK500-2BG4-380
	420	Reducer	Motor: Y3556-4、3 15kW、6 kV Reducer: ZDY315-3.55-I(Coiled Tube Cooling)	2BEK500-2BG4-420
	470	Reducer	Motor: Y4002-4、4 00kW、6 kV Reducer: ZDY355-3.15-I(Coiled Tube Cooling)	2BEK500-2BG4-470
2BEK520-2	230	Reducer	Motor: Y355M2-8、1 60kW、3 80V Reducer: ZDY250-3.15-I(Coiled Tube Cooling)	2BEK520-2BG4-230
	260	Reducer	Motor: Y315L2-4、2 00kW、3 80V Reducer: ZDY280-5.6-I(Coiled Tube Cooling)	2BEK520-2BG4-260
	300	Reducer	Motor: Y355M2-4、2 50kW、3 80V Reducer: ZDY315-5-I(Coiled Tube Cooling)	2BEK520-2BG4-300

Model	Rotating Speed (r/min)	Transmission Mode	Unit Configuration	Unit Code
2BEK520-2	340	Reducer	Motor: Y3555-4、2 80kW、6 kV Reducer: ZDY315-4.5-(Coiled Tube Cooling)	2BEK520-2BG4-340
	380	Reducer	Motor: Y3556-4、3 15kW、6 kV Reducer: ZDY355-4-I(Coiled Tube Cooling)	2BEK520-2BG4-380
	420	Reducer	Motor: Y4002-4、4 00W、6 kV Reducer: ZDY355-3.55-I(Coiled Tube Cooling)	2BEK520-2BG4-420
	470	Reducer	Motor: Y4004-4、5 00kW、6 kV Reducer: ZDY400-3.15-I(Coiled Tube Cooling)	2BEK520-2BG4-470
2BEK600-2	200	Reducer	Motor: Y355M2-6、1 85kW、3 80V Reducer: ZDY315-5-I(Coiled Tube Cooling)	2BEK600-2BG4-200
	230	Reducer	Motor: Y355L2-8、2 50kW、3 80V Reducer: ZDY315-3.15-I(Coiled Tube Cooling)	2BEK600-2BG4-230
	260	Reducer	Motor: Y3556-4、3 15kW、6 kV Reducer: ZDY315-5.6-I(Coiled Tube Cooling)	2BEK600-2BG4-260
	290	Reducer	Motor: Y4001-4、3 55kW、6 kV Reducer: ZDY355-5-I(Coiled Tube Cooling)	2BEK600-2BG4-290
	320	Reducer	Motor: Y4005-6、4 00kW、6 kV Reducer: ZDY400-3.15-I(Coiled Tube Cooling)	2BEK600-2BG4-320
	350	Reducer	Motor: Y4501-6、4 50kW、6 kV Reducer: ZDY450-2.8-I(Coiled Tube Cooling)	2BEK600-2BG4-350
	400	Reducer	Motor: Y4503-6、5 60kW、6 kV Reducer: ZDY560-2.5-I(Coiled Tube Cooling)	2BEK600-2BG4-400
2BEK620-2	200	Reducer	Motor: Y355L2-6、2 50kW、3 80V Reducer: ZDY315-5-I(Coiled Tube Cooling)	2BEK620-2BG4-200
	230	Reducer	Motor: Y4501-8、3 15kW、6 kV Reducer: ZDY315-3.15-I(Coiled Tube Cooling)	2BEK620-2BG4-230
	260	Reducer	Motor: Y4001-4、3 55kW、6 V Reducer: ZDY355-5.6-I(Coiled Tube Cooling)	2BEK620-2BG4-260
	290	Reducer	Motor: Y4002-4、4 00kW、6 kV Reducer: ZDY400-5-I(Coiled Tube Cooling)	2BEK620-2BG4-290
	320	Reducer	Motor: Y4501-6、4 50kW、6 kV Reducer: ZDY450-3.15-I(Coiled Tube Cooling)	2BEK620-2BG4-320
	350	Reducer	Motor: Y4503-6、5 60kW、6 kV Reducer: ZDY450-2.8-I(Coiled Tube Cooling)	2BEK620-2BG4-350
	400	Reducer	Motor: Y5001-6、7 10kW、6 kV Reducer: ZDY500-2.5-I(Coiled Tube Cooling)	2BEK620-2BG4-400
2BEK670-2	180	Reducer	Motor: Y4004-8、2 50kW、6 kV Reducer: ZDY315-4-I(Coiled Tube Cooling)	2BEK670-2BG4-180
	210	Reducer	Motor: Y4502-8、3 55kW、6 kV Reducer: ZDY355-3.55-I(Coiled Tube Cooling)	2BEK670-2BG4-210

Model	Rotating Speed (r/min)	Transmission Mode	Unit Configuration	Unit Code
2BEK670-2	240	Reducer	Motor: Y4002-4 , 4 00kW, 6 kV Reducer: ZDY355-6 .3 -I(Coiled Tube Cooling)	2BEK670-2BG4-240
	270	Reducer	Motor: Y4004-4 , 5 00kW, 6 kV Reducer: ZDY400-5 .6 -I(Coiled Tube Cooling)	2BEK670-2BG4-270
	300	Reducer	Motor: Y4005-4 , 5 60kW, 6 kV Reducer: ZDY450-5 -I(Coiled Tube Cooling)	2BEK670-2BG4-300
	320	Reducer	Motor: Y4505-6 , 6 30kW, 6 kV Reducer: ZDY500-3 .1 5-I(Coiled Tube Cooling)	2BEK670-2BG4-320
	330	Reducer	Motor: Y4501-4 , 6 30kW, 6 kV Reducer: ZDY500-4 .5 -I(Coiled Tube Cooling)	2BEK670-2BG4-330
	370	Reducer	Motor: Y4503-4 , 8 00kW, 6 kV Reducer: ZDY560-4 -I(Coiled Tube Cooling)	2BEK670-2BG4-370
2BEK720-2	170	Reducer	Motor: Y4003-6 , 3 15kW, 6 kV Reducer: ZDY400-5 .6 -I(Coiled Tube Cooling)	2BEK720-2BG4-170
	190	Reducer	Motor: Y4005-6 , 4 00kW, 6 kV Reducer: ZDY400-5 -I(Coiled Tube Cooling)	2BEK720-2BG4-190
	210	Reducer	Motor: Y4504-8 , 4 50kW, 6 kV Reducer: ZDY400-3 .5 5-I(Coiled Tube Cooling)	2BEK720-2BG4-210
	240	Reducer	Motor: Y4005-4 , 5 60kW, 6 kV Reducer: ZDY450-6 .3 -I(Coiled Tube Cooling)	2BEK720-2BG4-240
	270	Reducer	Motor: Y4501-4 , 6 30kW, 6 kV Reducer: ZDY500-5 .6 -I(Coiled Tube Cooling)	2BEK720-2BG4-270
	300	Reducer	Motor: Y4502-4 , 7 10kW, 6 kV Reducer: ZDY560-5 -I(Coiled Tube Cooling)	2BEK720-2BG4-300

Notice:

- 1、2BEK water ring vacuum pump, each variety has a variety of speed, material can be selected, the same speed and different transmission supporting forms, the table above only lists part of the supporting form, for reference when selecting;
- 2、The motor supporting power in the table above can meet the vacuum pump in the full suction range, such as vacuum pump can be fixed at a certain point or a certain section of inhalation pressure work, but also according to the actual shaft power of the work point configuration motor, motor power may be less than the power in the table;
- 3、According to the specific operating conditions and use of the environment to choose the reducer;
- 4、If the vacuum pump discharge pressure is higher than the atmospheric pressure, according to operating conditions, the motor power may be increased;
- 5、The requirements of explosion-proof belt transmission motive group, must be equipped with anti-static belt;
- 6、The casing with the spacer plate pump, the two sides of the pump can work under different suction pressure. Its speed, supporting form and form mounting size are the same as the corresponding original pump.
- 7、Interface flange standard GB/T9119-2010 PN10.

KVDP Series Water Ring Vacuum Pump

Overview

The KVDP series of water ring vacuum pumps is a two-stage single-acting water ring vacuum pump.

The KVDP series of water ring vacuum pumps compresses the gas in two stages, with a smaller single-stage compression ratio. The gas is further compressed and discharged after the second stage, reducing the first stage exhaust pressure and carrying it The vacuum of the high first stage suction port. Pumping speed is smooth and dimensional in a high vacuum range hold enough pumping rate. The efficiency is higher at higher vacuum operation than single-stage water ring pumps Increase energy consumption by 35% to 40%.



Product Feature

- 1、The limit pressure up to 2Kpa, the inlet working pressure range of 5Kpa to 20Kpa;
- 2、A variety of specifications to meet the needs of a variety of processes;
- 3、Stainless steel, two-phase steel, titanium and other materials to meet the needs of different conditions;
- 4、Reliable impeller locking anti-loose way;
- 5、Both ends of the mechanical seal, a variety of flushing options;
- 6、Standard anti-cavitation device;
- 7、Reliable performance, energy-efficient;
- 8、Precision castings, imported bearings, high-standard accessories.

Application

Suitable for chemical, food, pharmaceutical, textile, electricity, paper, metallurgy, instruments and other industries of vacuum drying, concentration, evaporation, distillation, dehydration, degassing, filtration and other processes.

Comparison and selection of two-stage liquid ring pump and single-stage liquid ring pump

The two-stage and single-stage water ring vacuum pumps are designed and developed for different operating conditions. Single-stage vacuum pump limit pressure of 3300Pa, ideal operating pressure range of 20Kpa-100Kpa, when the inlet pressure is less than 20Kpa, the pumping volume rapidly decayed, in 5000 to 10000Pa even less than 30% of the maximum pumping speed, in this operating conditions, the efficiency is very low, high power consumption. However, in the crude vacuum state, it shows the advantage of pumping a large amount of gas. The two-stage water ring vacuum pump, in the high vacuum range can obtain a greater pumping speed, or in a large pumping rate range to maintain a high vacuum in a higher vacuum operation state, the efficiency of the single-stage water ring pump increased by 35% to 40%, energy consumption is also reduced accordingly. Therefore, the right vacuum pump should be selected according to the conditions of use in order to reduce the economical operation of energy consumption.

Technical Parameter Table

Model	Minimum Suction Pressure	Maximum Suction	Rotating Speed	Motor Power	Transmission Mode
	hPa	m ³ /h	rpm	kW	
KVDP8	33	480	1470	18.5	Direct
KVDP10	33	620	1470	22	Direct
KVDP12	33	700	1470	30	Direct
KVDP16	33	980	980	37	Direct
KVDP20	33	1250	980	45	Direct
KVDP28	33	1680	980	55	Direct
KVDP32	33	1960	735	75	Direct
KVDP38	33	2240	735	90	Direct
KVDP55	33	3280	735	110	Direct
KVDP75	33	4510	590	132	Direct

The Model Represents Method

For example: KVDP20-0BD5-980

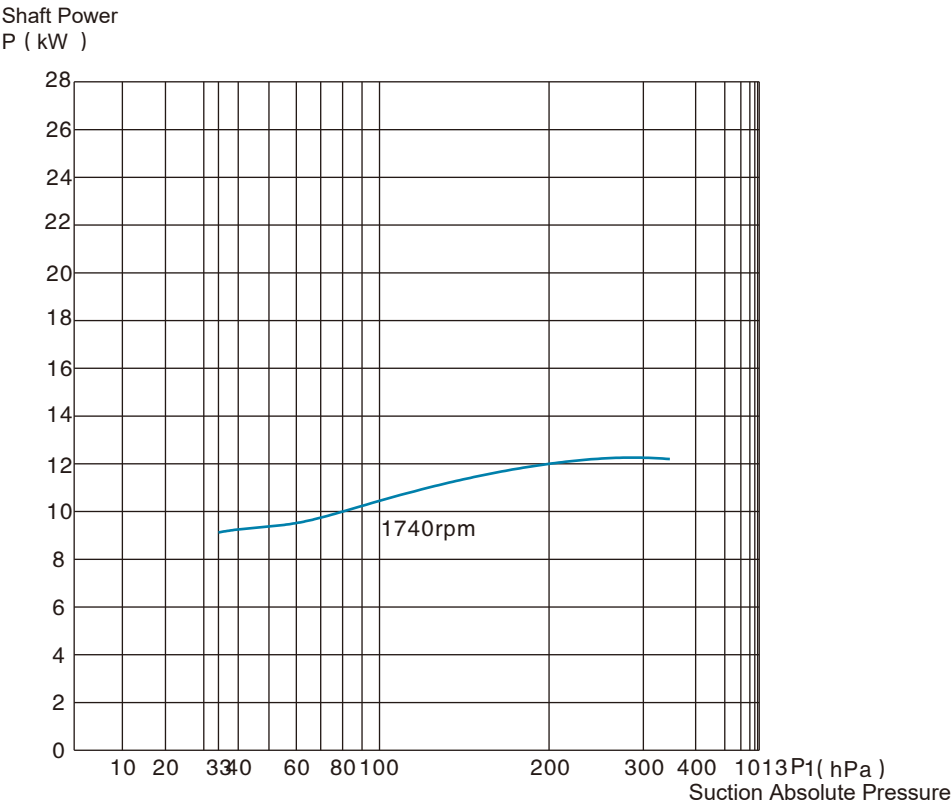
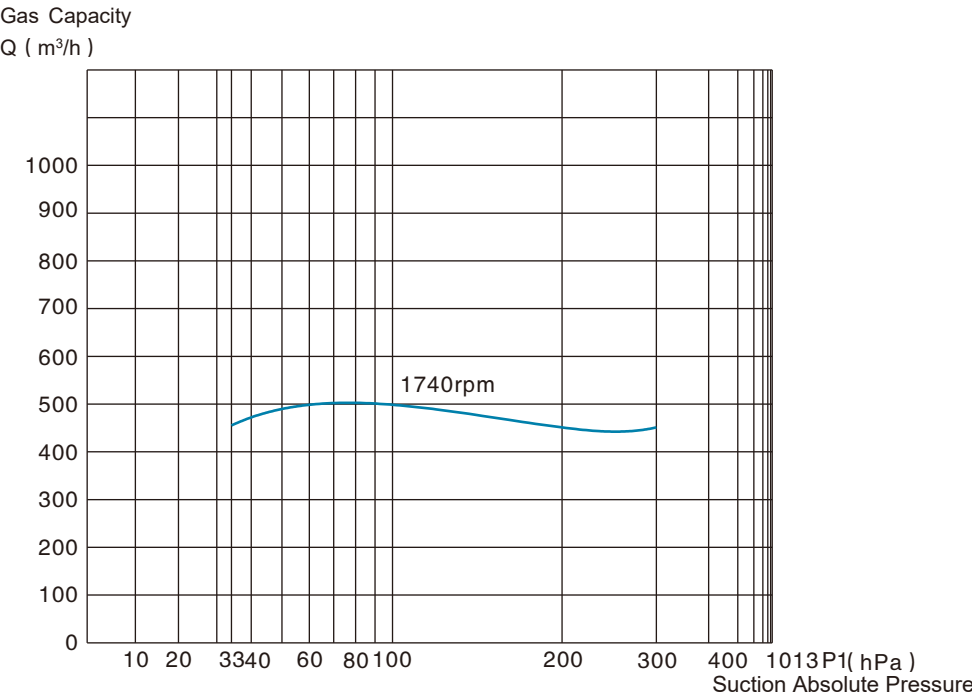
KVDP	Vacuum pump series number					
	20	Pump specification code				
		0	Pump minimum suction absolute pressure 33hPa			
			B	Casing, impeller, dispenser material is cast iron carbon steel		
			E	Casing, impeller, dispenser material is 304		
			H	Casing, impeller, dispenser material is 316		
			F	Casing, impeller, dispenser material is 316L		
			M	Other materials		
				D	Direct transmission of motor	
				V	Belt drive	
				G	Reducer drive	
					5	Single end face inside water supply mechanical seal
					6	Single end outside water supply mechanical seal
					7	Double face machine seal
					980	The pump speed

Material Selection table

KVDP Pump Material Selection Table		
Name	General Configuration	Optional Materials
Impeller	QT400	304、316、316L, etc
Casing	HT250	304、316、316L, etc
Distributor	HT250	304、316、316L, etc
Side cover	HT250	304、316、316L, etc
Shaft	45	2Cr13, etc
Sleeve	304	316、316L, etc
Bearing	Domestic	NSK、SKF, etc
Shaft Seal	Single-sided machine seal	

KVDP Series Water Ring Vacuum Pump Performance Curve

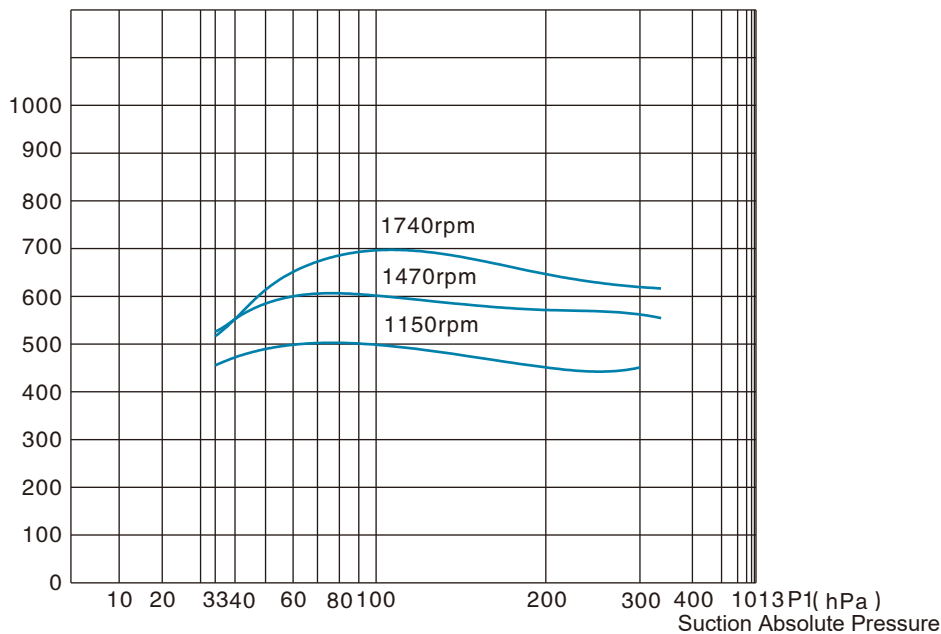
KVDP8 Performance Curve



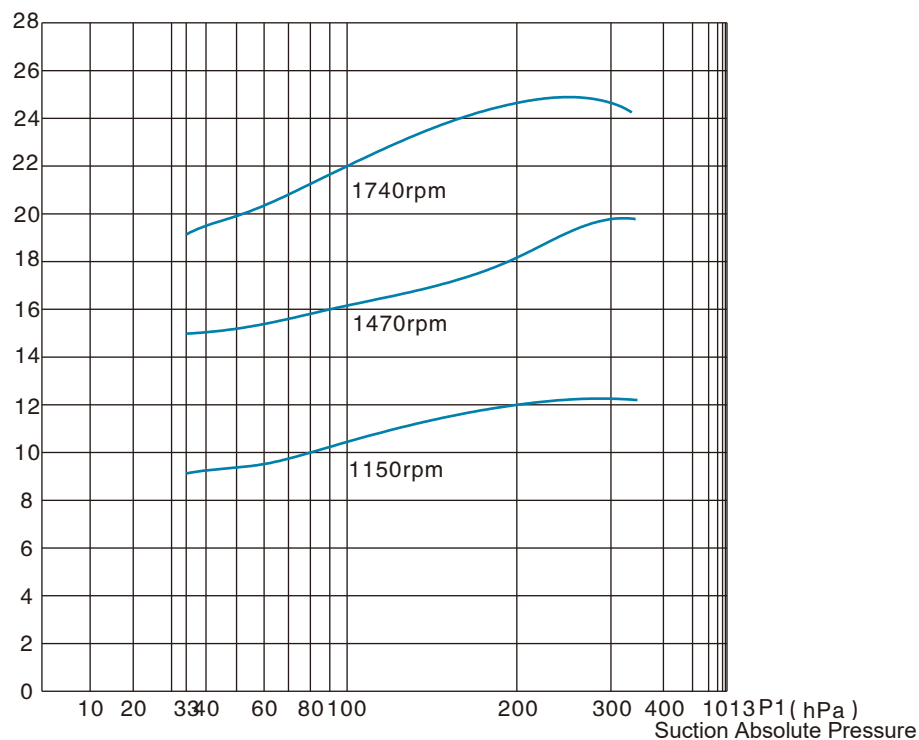
Notice: The performance of the upper chart is based on the suction temperature of 20℃, the relative humidity of 50%, the operating fluid temperature of 15℃, the exhaust pressure is a standard atmospheric pressure of 1013.25 hPa.

KVDP10 Performance Curve

Gas Capacity
Q (m³/h)

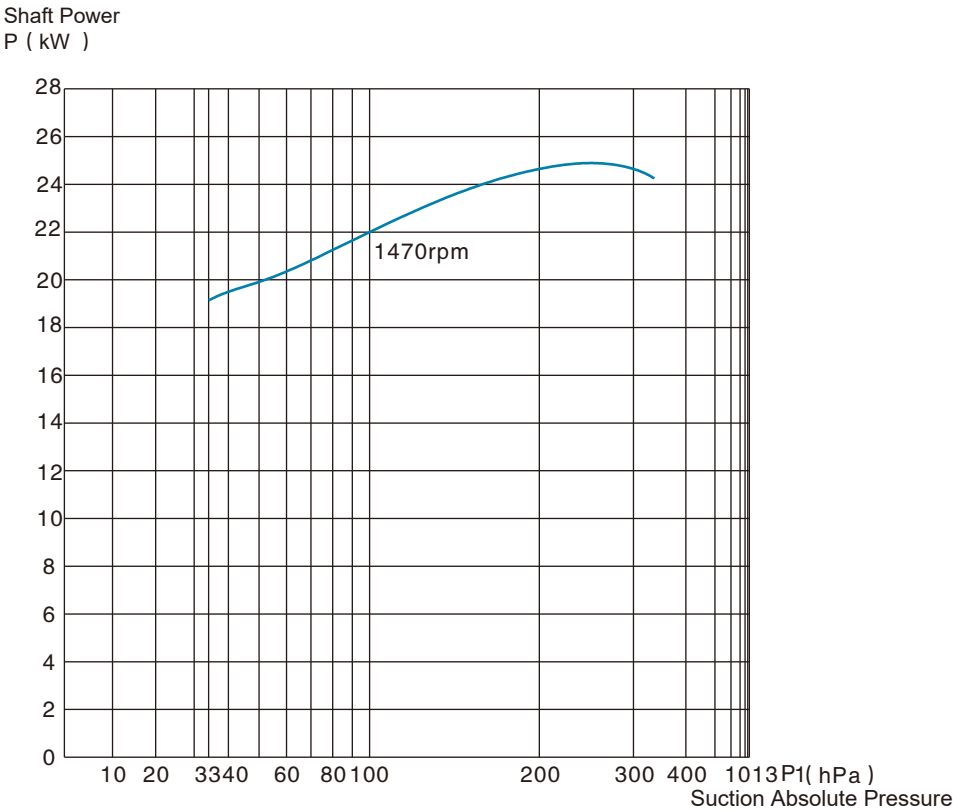
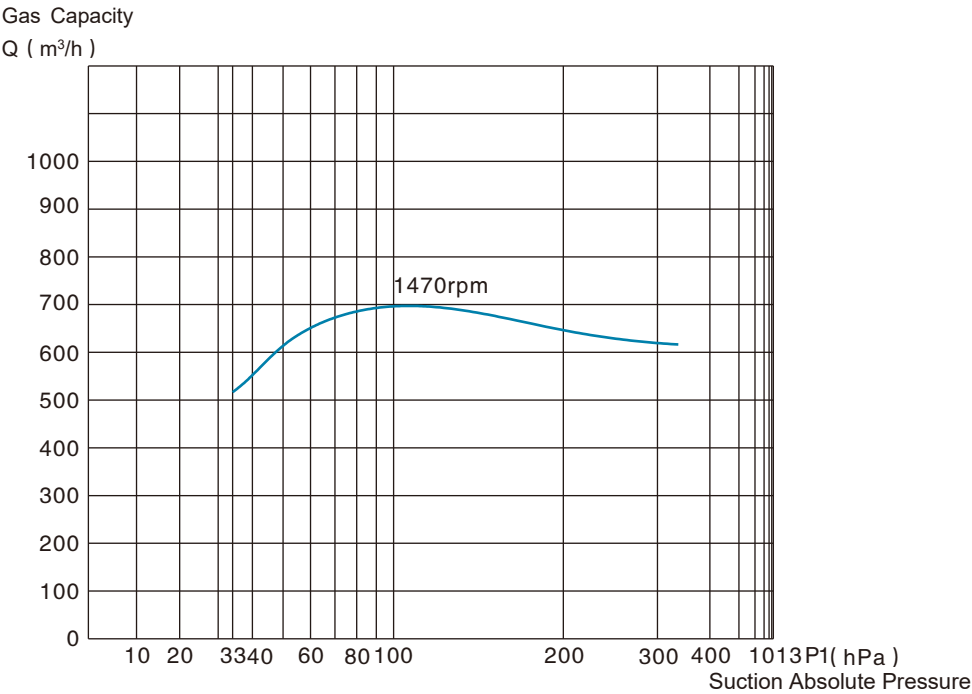


Shaft Power
P (kW)



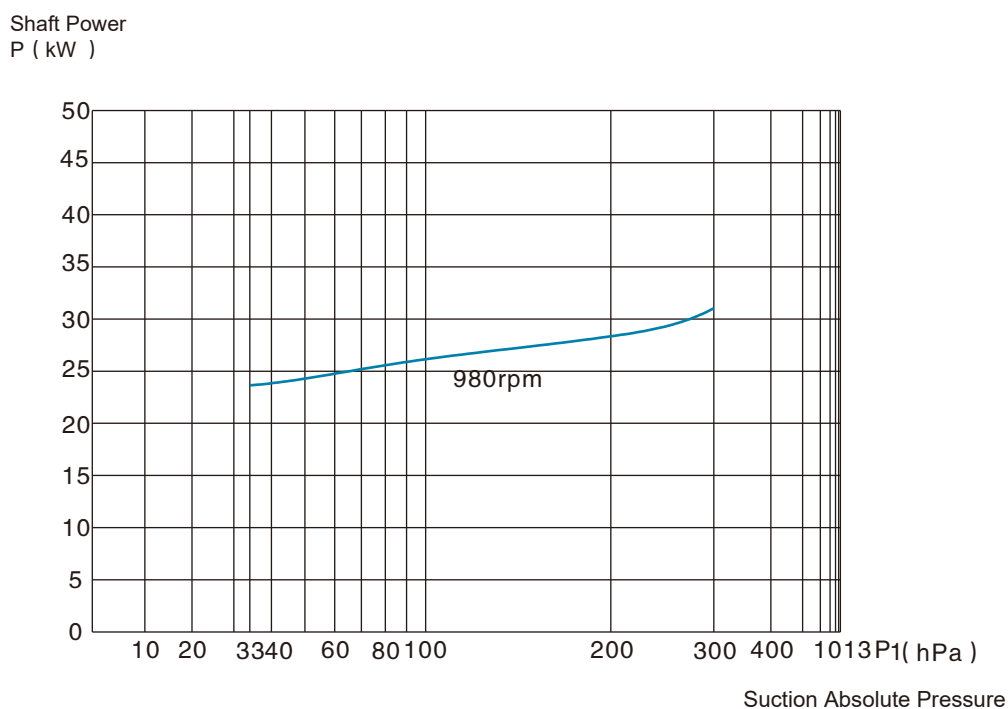
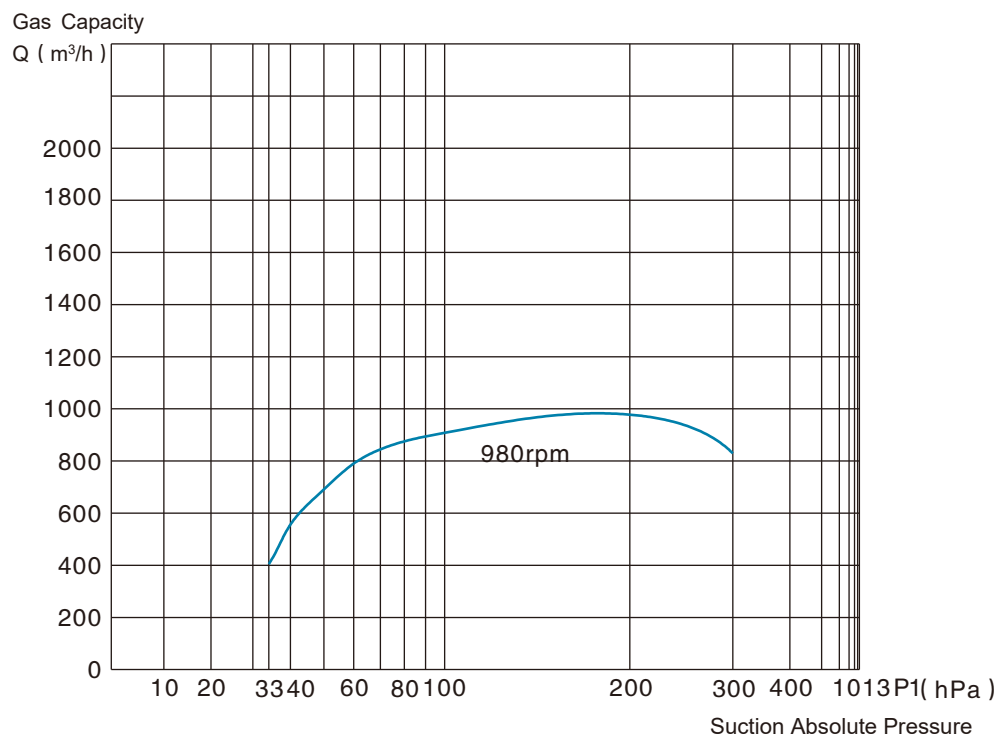
Notice: The performance of the upper chart is based on the suction temperature of 20°C, the relative humidity of 50%, the operating fluid temperature of 15°C, the exhaust pressure is a standard atmospheric pressure of 1013.25 hPa.

KVDP12 Performance Curve



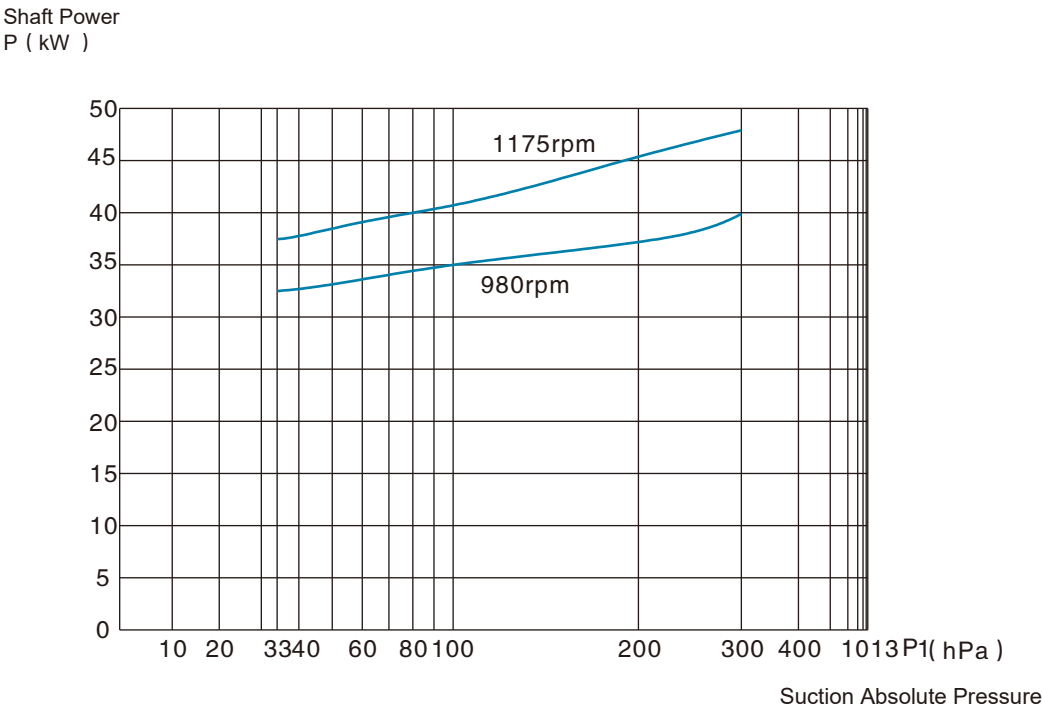
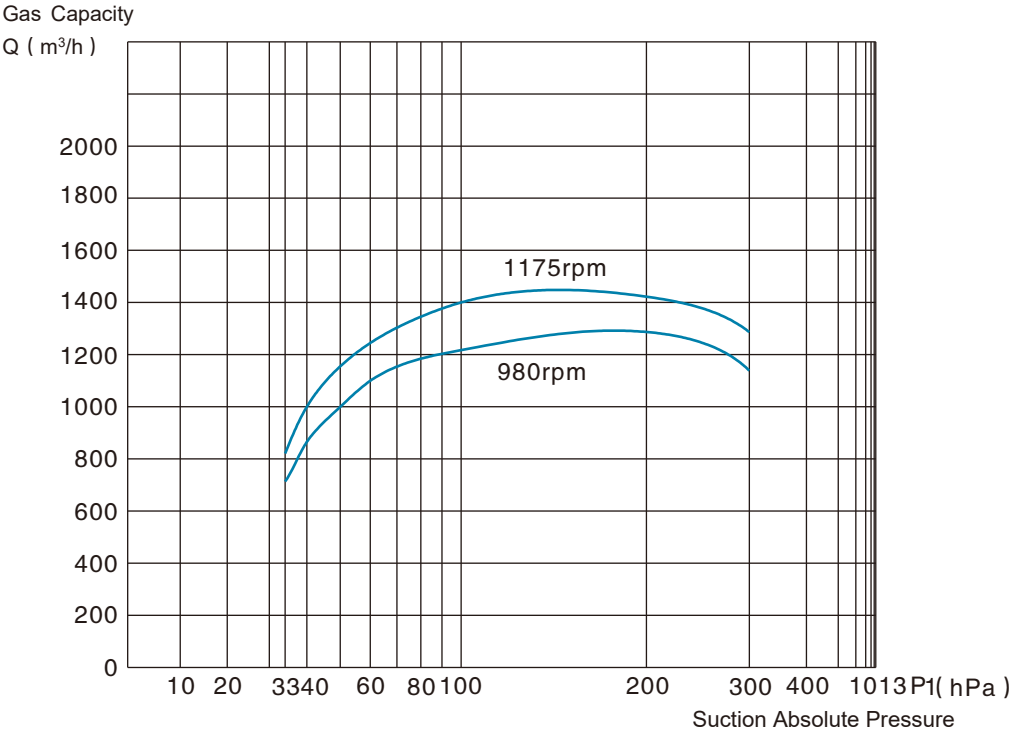
Notice: The performance of the upper chart is based on the suction temperature of 20℃, the relative humidity of 50%, the operating fluid temperature of 15℃, the exhaust pressure is a standard atmospheric pressure of 1013.25 hPa.

KVDP16 Performance Curve



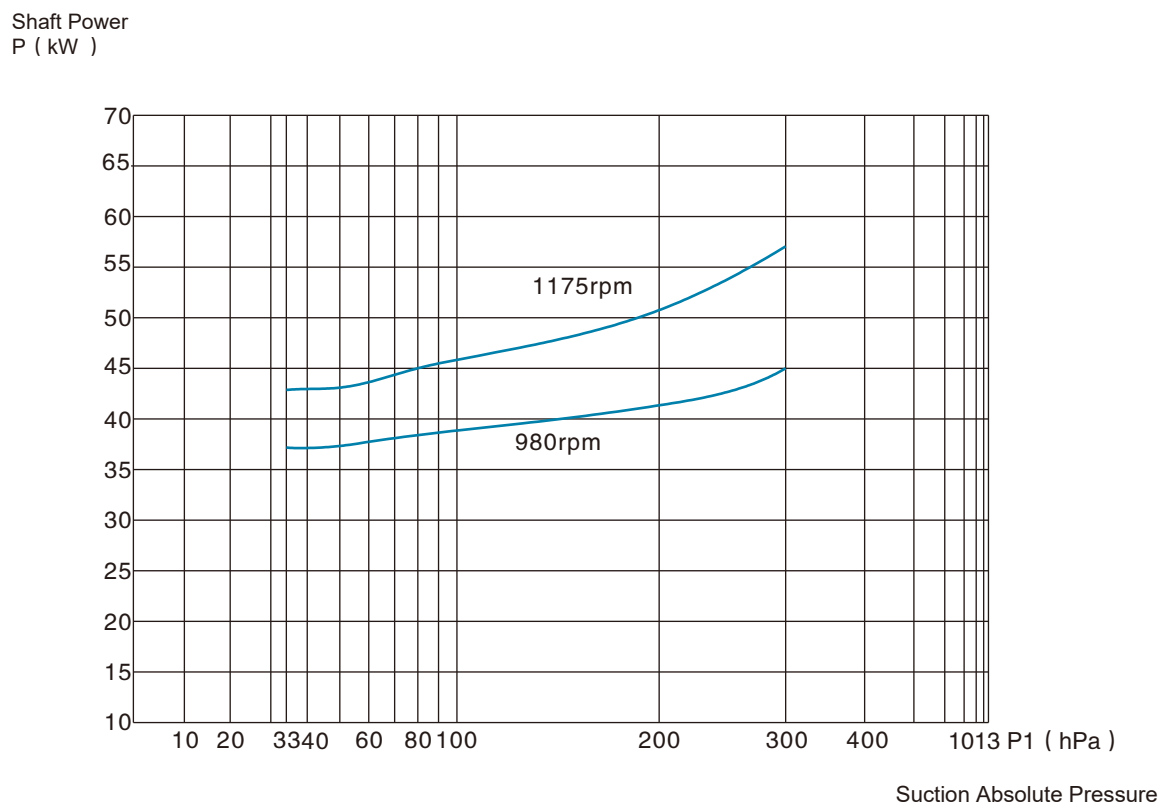
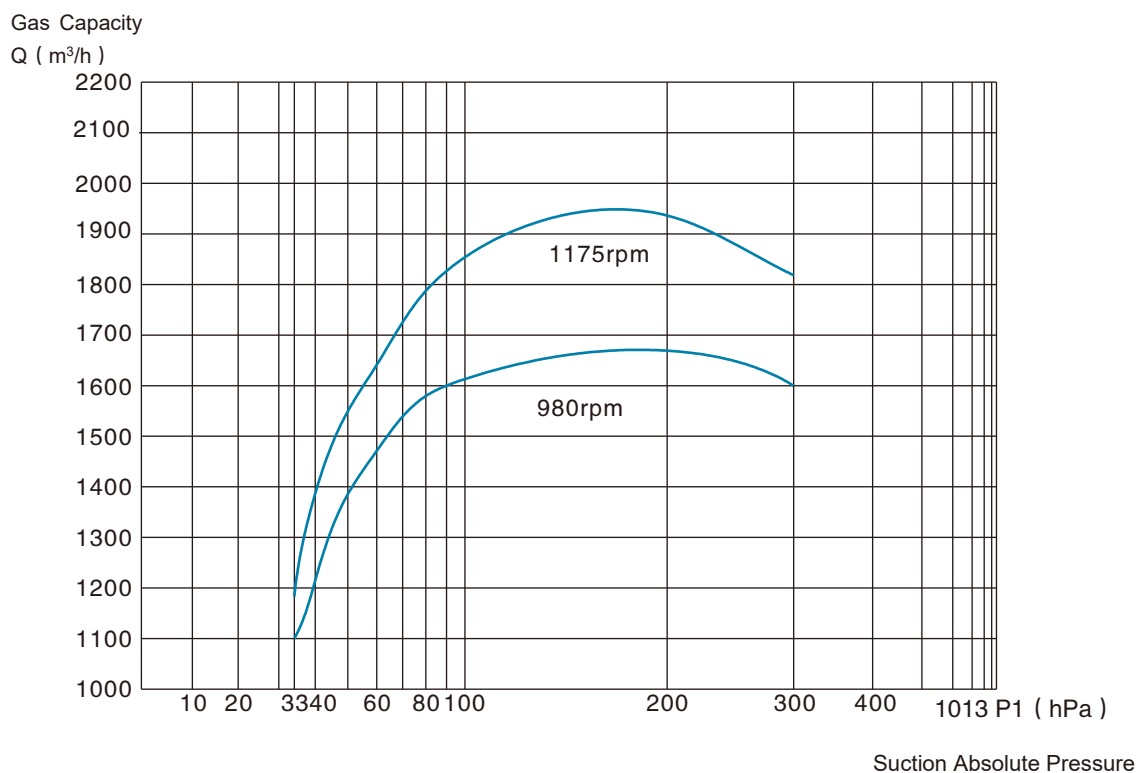
Notice: The performance of the upper chart is based on the suction temperature of 20℃, the relative humidity of 50%, the operating fluid temperature of 15℃, the exhaust pressure is a standard atmospheric pressure of 1013.25 hPa.

KVDP20 Performance Curve



Notice: The performance of the upper chart is based on the suction temperature of 20°C, the relative humidity of 50%, the operating fluid temperature of 15°C, the exhaust pressure is a standard atmospheric pressure of 1013.25 hPa.

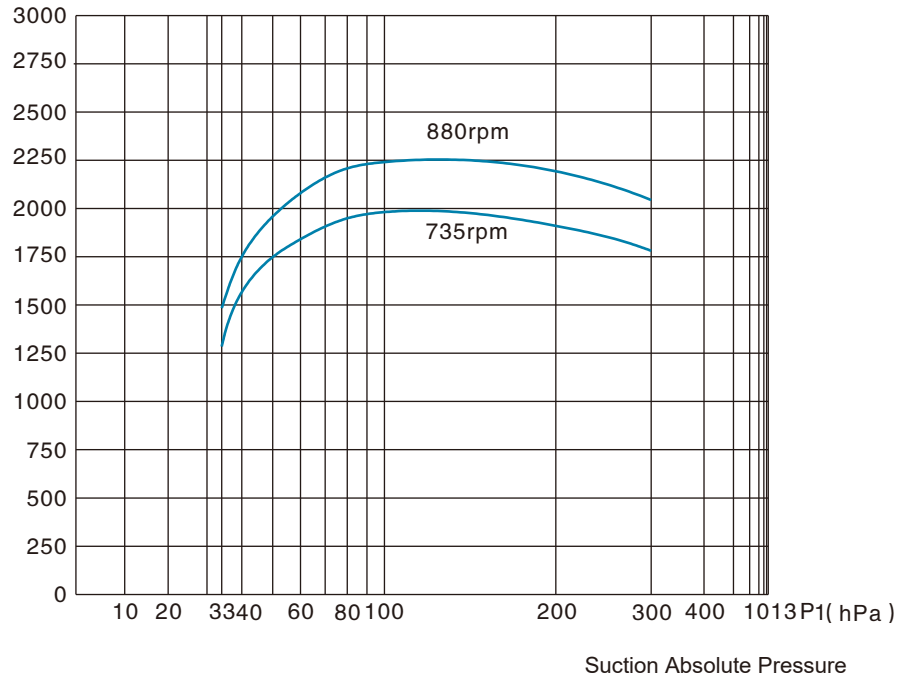
KVDP28 Performance Curve



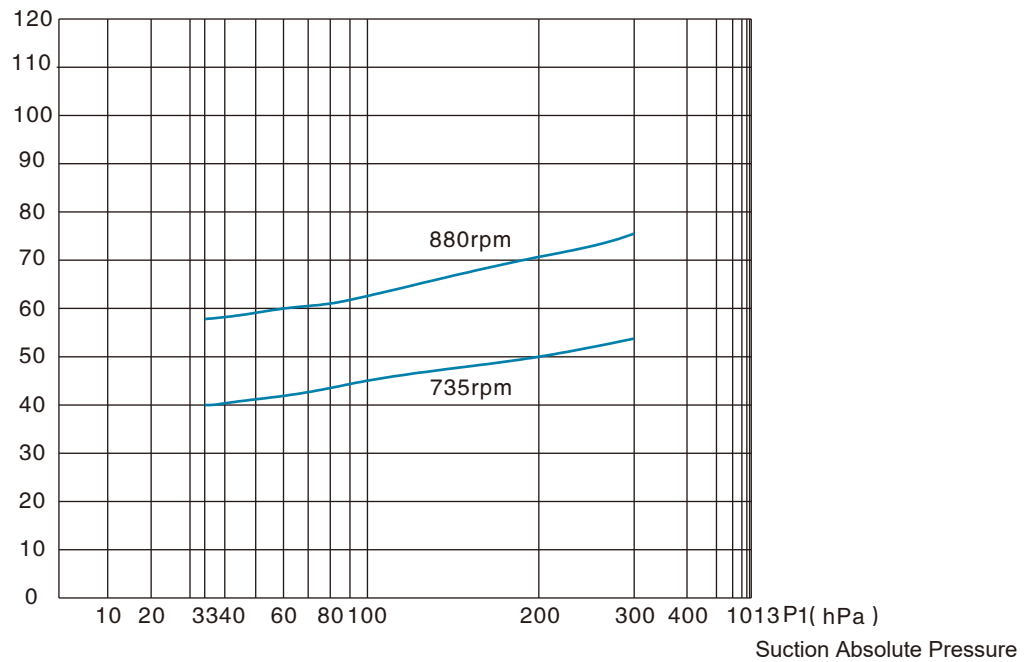
Notice: The performance of the upper chart is based on the suction temperature of 20°C, the relative humidity of 50%, the operating fluid temperature of 15°C, the exhaust pressure is a standard atmospheric pressure of 1013.25 hPa.

KVDP32 Performance Curve

Gas Capacity
Q (m³/h)

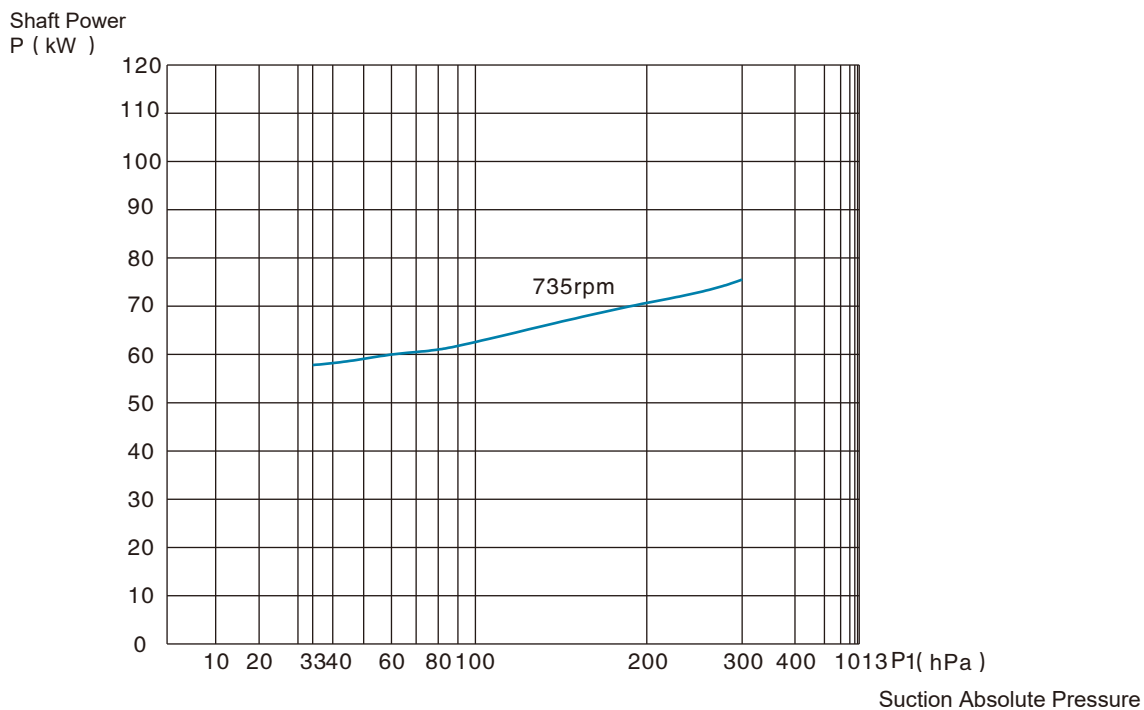
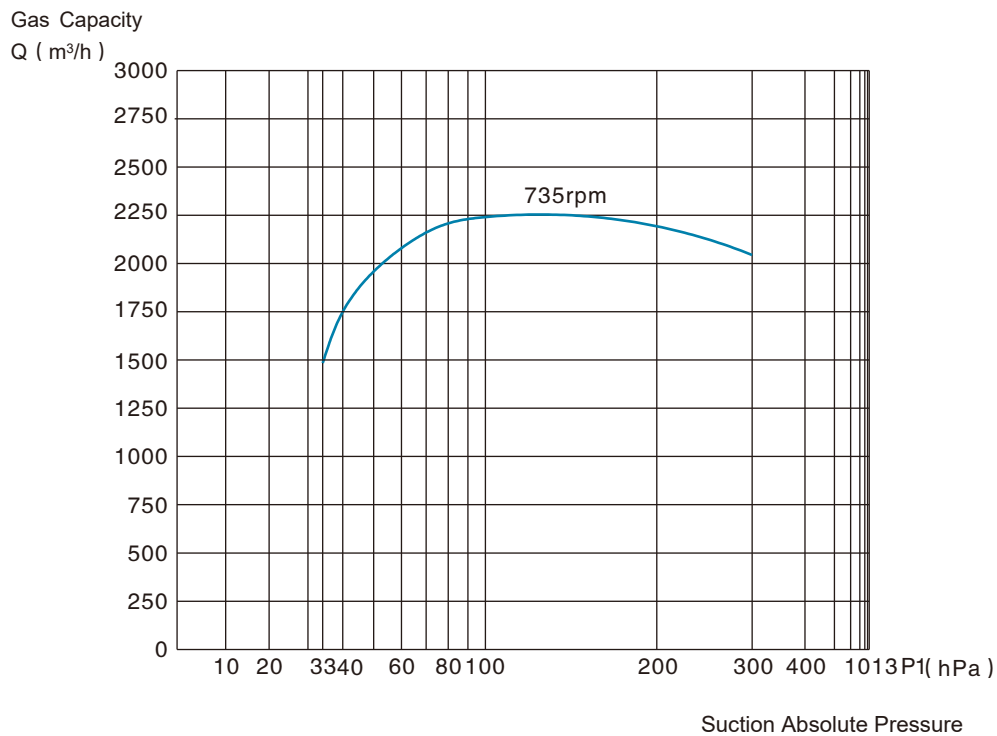


Shaft Power
P (kW)



Notice: The performance of the upper chart is based on the suction temperature of 20°C, the relative humidity of 50%, the operating fluid temperature of 15°C, the exhaust pressure is a standard atmospheric pressure of 1013.25 hPa.

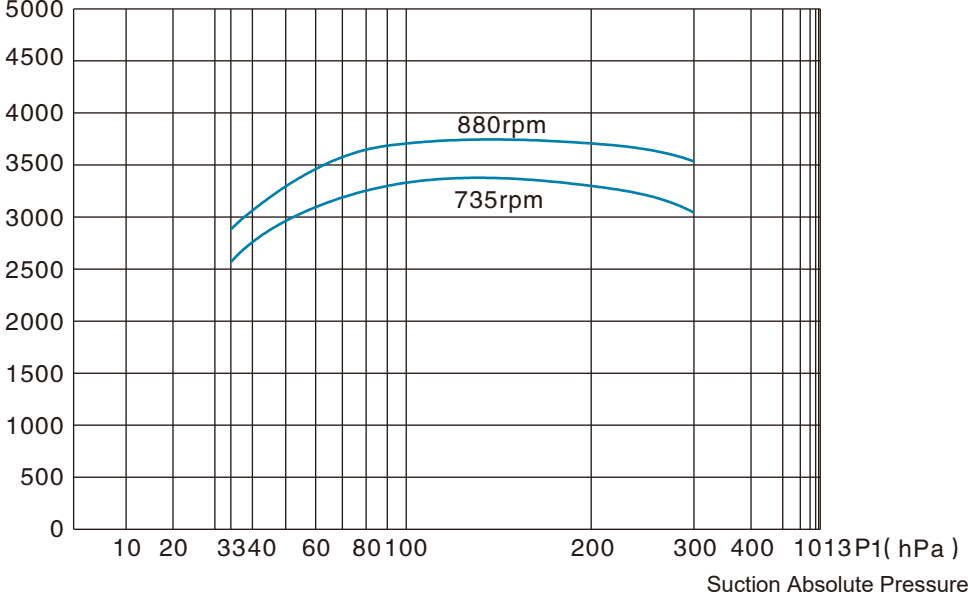
KVDP38 Performance Curve



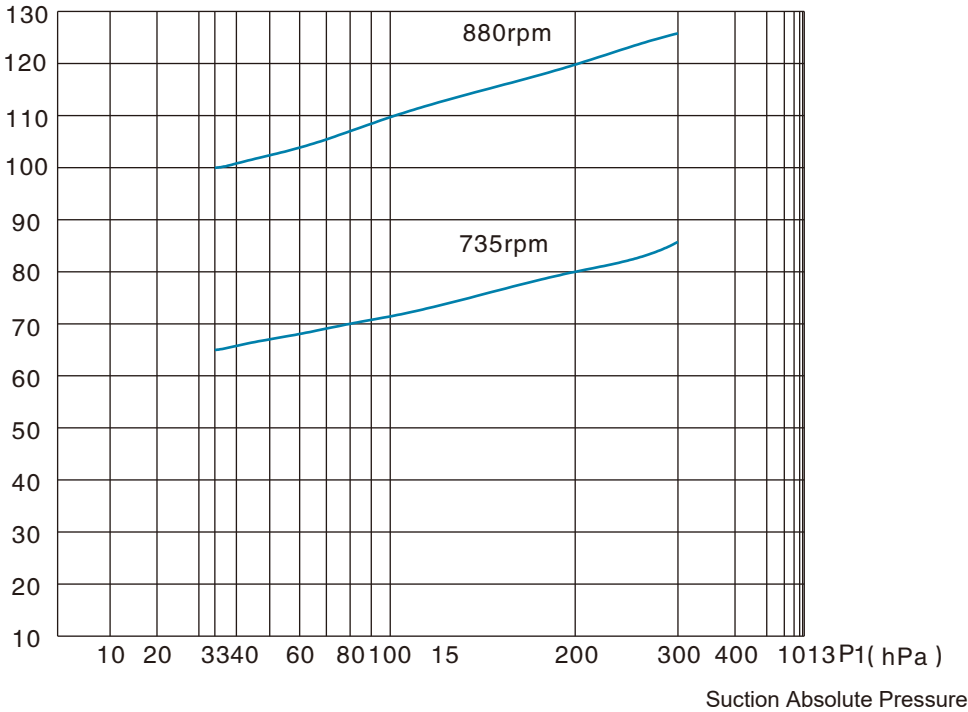
Notice: The performance of the upper chart is based on the suction temperature of 20℃, the relative humidity of 50%, the operating fluid temperature of 15℃, the exhaust pressure is a standard atmospheric pressure of 1013.25 hPa.

KVDP55 Performance Curve

Gas Capacity
Q (m³/h)

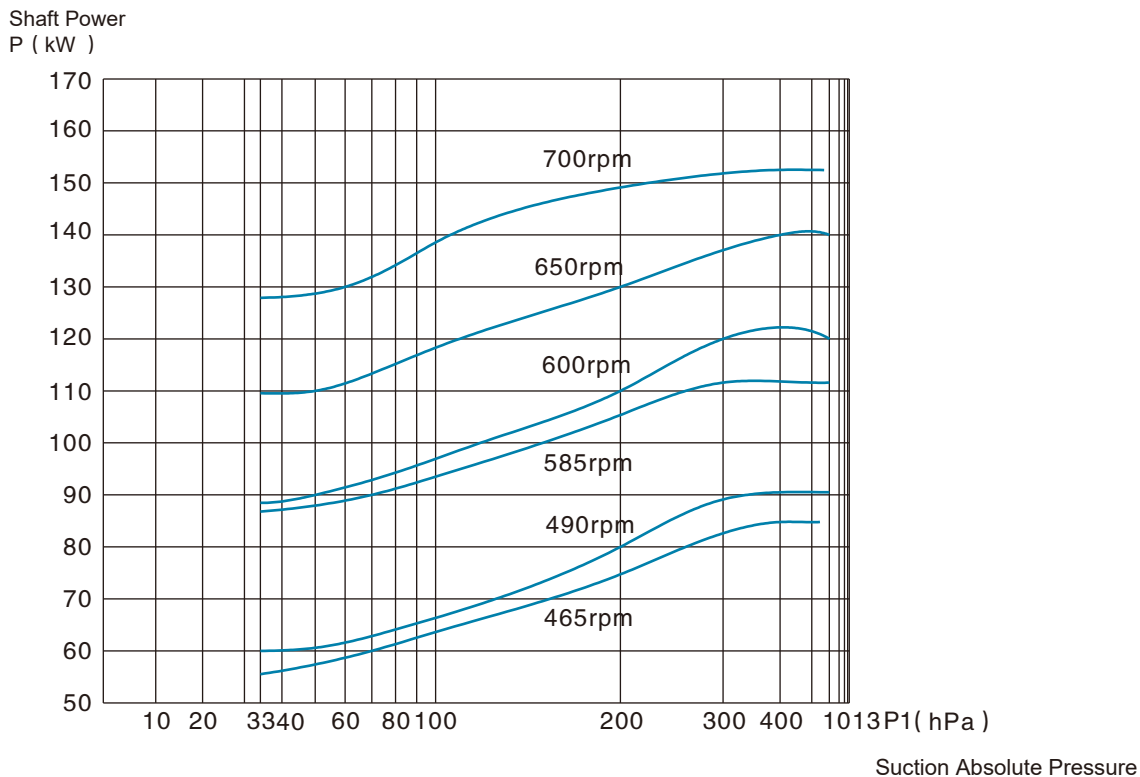
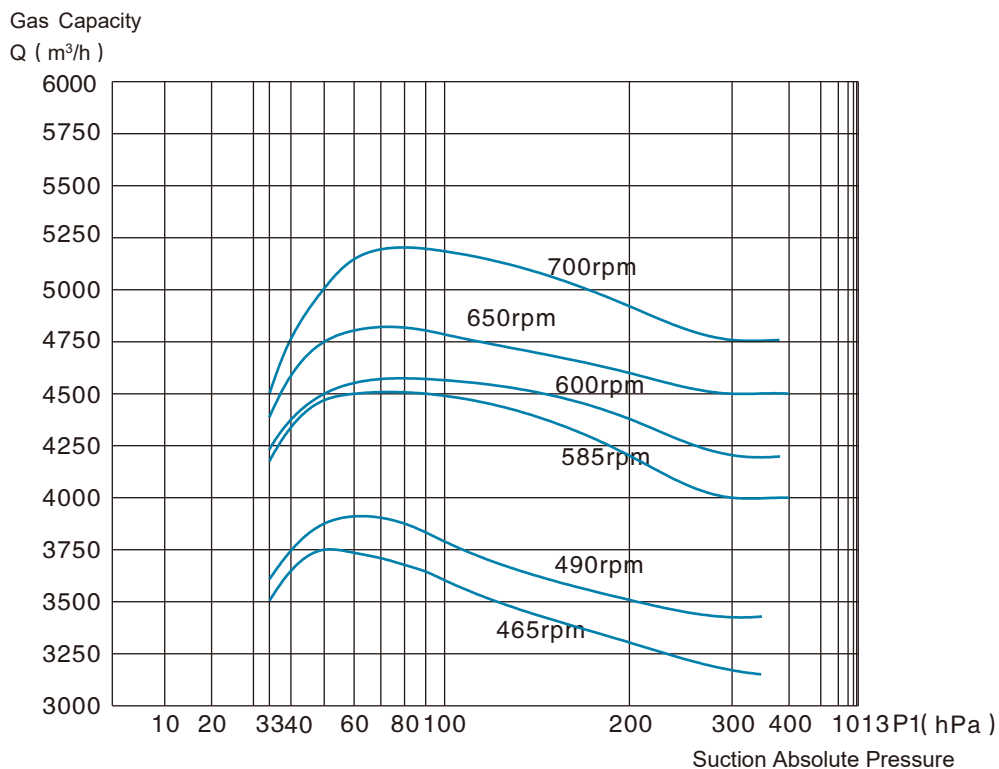


Shaft Power
P (kW)



Notice: The performance of the upper chart is based on the suction temperature of 20°C, the relative humidity of 50%, the operating fluid temperature of 15°C, the exhaust pressure is a standard atmospheric pressure of 1013.25 hPa.

KVDP75 Performance Curve



Notice: The performance of the upper chart is based on the suction temperature of 20℃, the relative humidity of 50%, the operating fluid temperature of 15℃, the exhaust pressure is a standard atmospheric pressure of 1013.25 hPa.

YS Series Complete Set of Vacuum Water Diversion Device

Overview

YS series complete set of vacuum water diversion device, suitable for water works, thermal power plants, iron and steel works, sewage treatment plants, chemical plants, water conservancy drainage and irrigation engineering, mariculture and other diversion systems, can also be used for siphon loading and unloading of wharf oil depot, vacuum conveying in food industry, vacuum siphon in chemical industry, etc.

With a variety of specifications configuration, to meet the requirements of different operating conditions.

Product Feature

- 1、Energy-efficient: YS series water-draining equipment using my company's 2BEX, 2BVX series of water ring vacuum pumps, high efficiency, energy-saving effect is obvious;
- 2、A full range: many specifications, there are fully automatic and simple type of a variety of configuration styles;
- 3、Optimization design: complete set of unit design structure compact and reasonable, simple installation, easy maintenance;
- 4、Automatic control, safe and reliable: configuration of my company KQK-type control cabinet, can achieve vacuum pump start-up, vacuum pump parking, pump start-up and other processes of automatic control, easy to operate;

Model Represent Method

For example: YS070-2A03

YS	Diversion device series number			
	70	Vacuum pump model		
		2	The number represents the number of vacuum pumps in the drain unit	
			A	Fully automatic type (vacuum direct water draw and vacuum hold)
			B	Fully automatic (vacuum direct water)
			J	Simple type (vacuum direct water)
			AS	AS type unit
			AK	AK type unit
			AT	AT type unit
			AW	AW type unit
			AP	AP unit (ejector draws water)
			BP	BP unit (ejector draws water)
			T	Special water-drawing unit
			03	The numbers represent drainage for several pumps

Selection Instruction

The vacuum pump is generally selected according to the pumping volume and maximum vacuum value and is equipped with a backup pump. The 2BVX and 2BEX series of vacuum pumps can meet the requirements of the maximum vacuum value of the pump drainage, so as long as the amount of pumping can be calculated. The pumping method recommended by the water supply and drainage profession is as follows:

$$Q = K \frac{Q_1 + Q_2}{T} \times \frac{H_g}{H_g - Z_s}$$

Q- pumping capacity m/min

K-air leakage coefficient 1.05~1.1

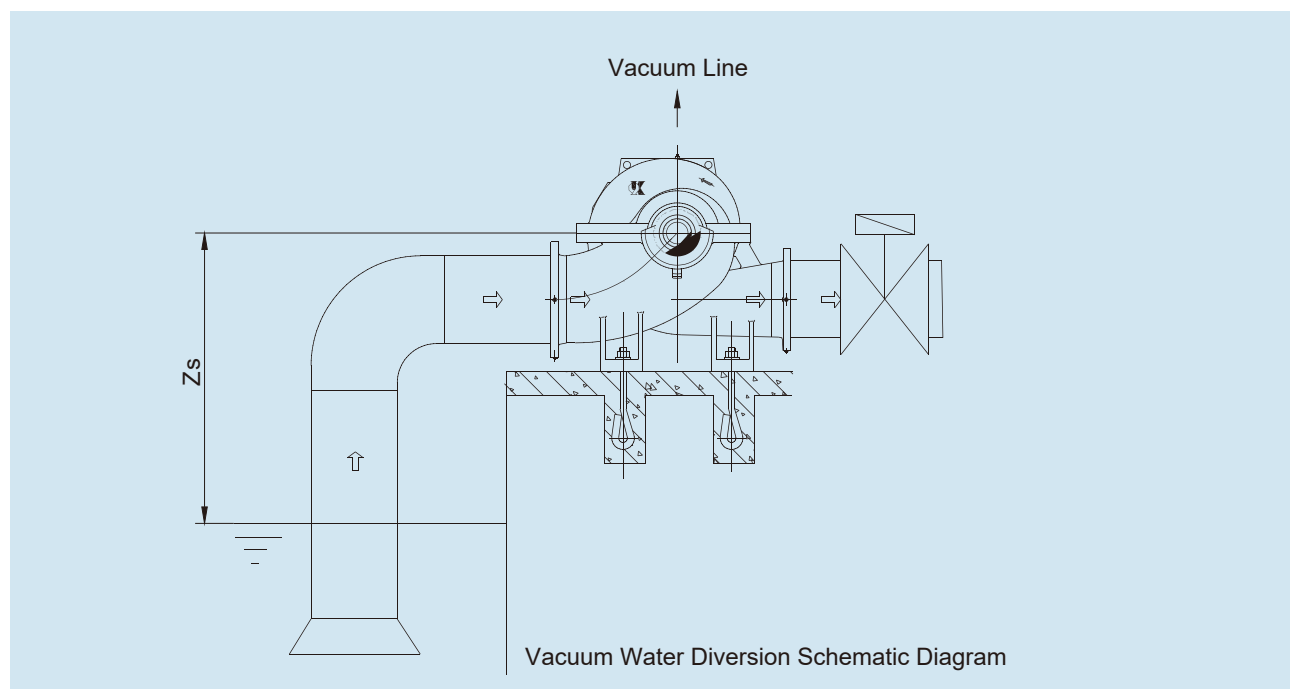
Q1- Air volume m in the suction pipe

Q2- pump volume. Calculate when take the pump suction inlet area times the suction inlet to the outlet valve distance

T- diversion time, no more than 5min

H_g - water column height at local atmospheric pressure (standard atmospheric pressure water column height 10.33m)

Z_s - difference m between the pump shaft and the lowest water level of the suction well



Ordering Instruction

- 1、 The user can determine the complete set of models and select the appropriate vacuum pump according to the vacuum time and system volume;
- 2、 Common vacuum pump models are listed in the performance table. If you choose other vacuum pumps, please refer to Shanghai Kaiquan 2BEX, 2BVX series water ring vacuum pump samples;
- 3、 according to the user's request for special vacuum tank, electronic control device, optional vacuum pump, customized interface flange size; Our factory produces various series of pumps, which can be selected and configured for users;
- 4、 According to special needs, the specific configuration and realization function of complete sets of equipment can be contacted with Kaiquan Technical Department.

YS-A type vacuum water diversion device is used for pre-vacuuming of centrifugal pump before startup and vacuum keeping during operation.

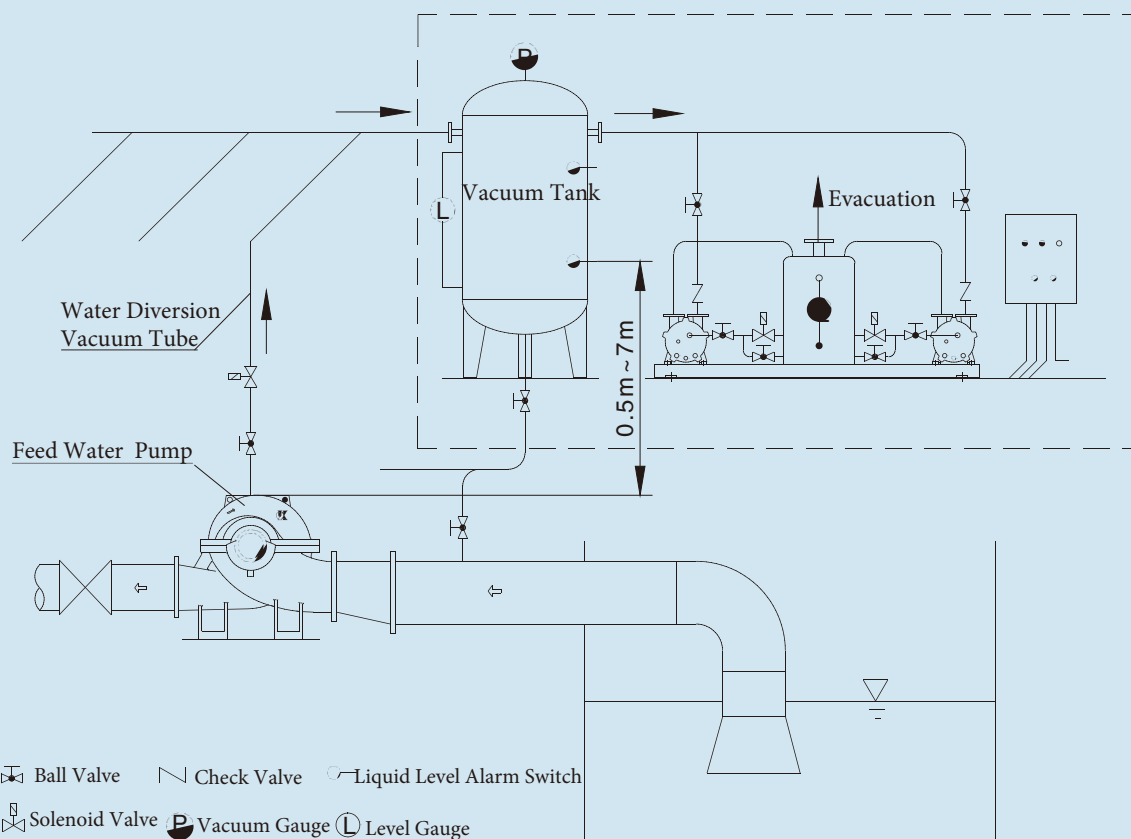
Working principle: Two water ring vacuum pumps are used for one use and the other for standby. The vacuum tank liquid level is used to automatically control the start and stop of the vacuum pump to ensure that the vacuum tank liquid level is kept within the required range, so as to ensure that the pump chamber is always filled with water when the pump is standing by, and the pump can be started at any time without delay. During the operation of the pump, the pressure in the vacuum tank ADAPTS to the pressure in the suction pipe of the pump, and the water in the vacuum tank can be discharged continuously. The vacuum pump starts automatically whether the water level of the vacuum tank drops due to gas escape during standby or operation. If the pump water level is consistent, the connecting pipe is not connected to the suction pipe, directly into the suction tank.

Composition of Type A device, vacuum tank (with level gauge and level switch)

- Water ring vacuum pump (standard 2)
- Solenoid valves, system valves and piping
- Gas water separator
- Control cabinet



YS-A Type Automatic Vacuum Water Diversion Process Diagram



General supply scope: dotted line equipment and valves on the pilot vacuum tube

YS-B automatic vacuum water guide complete set of devices to meet the requirements of vacuum water introduction and achieve the corresponding automatic control.

After pressing the control cabinet start button, the drain line normally closed solenoid valve opens, while the vacuum pump working pump starts and water draw begins. After the water, the water capacity switch action, close the pumping line solenoid valve, vacuum pump stop, start the water pump, open the water pump outlet valve, pump normal operation.

If the pump outlet valve is not an automatic valve, the vacuum pump needs to be manually closed before starting.

Once the pump is started, open the valve.

Composition of type B unit: water ring vacuum pump (2 as standard)

Solenoid valves, system valves and lines

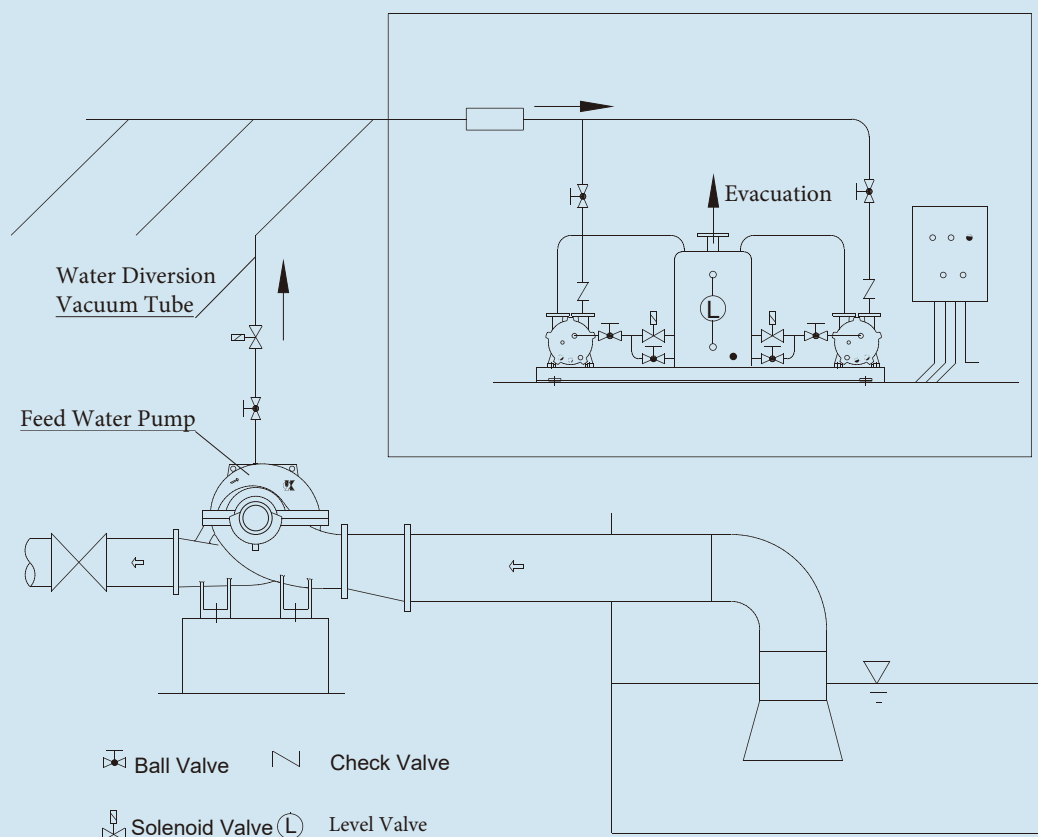
Water capacity switch

Air-water separator (with level meter)

Control cabinet



YS-B Type Automatic Vacuum Water Diversion Process Diagram

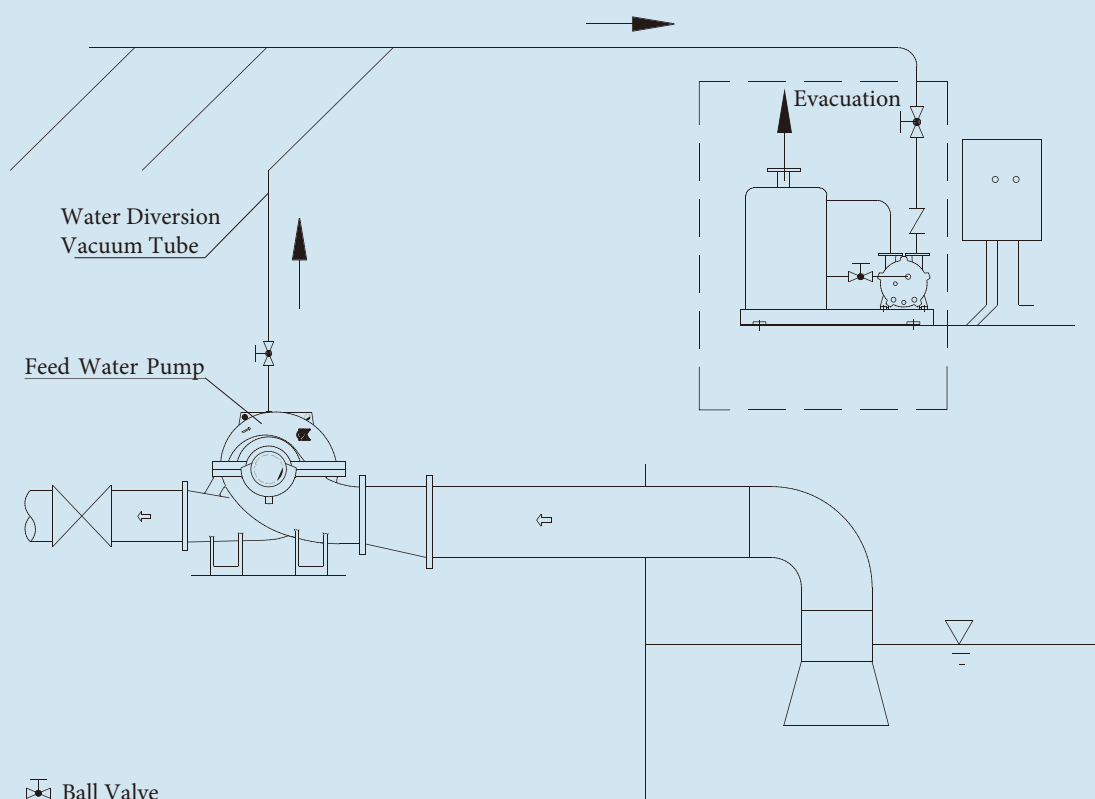


General supply scope: dotted line equipment and valves on the pilot vacuum tube

YS-J type simple vacuum water drainage device to meet the automatic requirements of the vacuum drainage application complete set of devices mainly by the water ring vacuum pump, gas and water separator, system line composition device manual control. Manual observation of the drainage process, vacuum pump opening and stopping, valve switches are for manual operation.



YS-J Type Automatic Vacuum Water Diversion Process Diagram



General supply scope: dotted line equipment and valves on the pilot vacuum tube

YS-AS type vacuum drainage device for pre-pumping and operating vacuum hold of centrifugal pumps, especially for large water plants.

How it works: Two water ring vacuum pumps in one use, the use of vacuum tank pressure switch to control the vacuum pump start and stop, to ensure that the vacuum tank negative pressure remains within the required range, the vacuum tank water can be discharged without affecting the vacuum tank negative pressure. Using the negative pressure of the vacuum tank, the pumping tank fills the pump cavity with water at all time and the pump can be activated at any time. No delay in powering on is required. The water pump runs

Medium, the pump tank pressure and the pressure of the water pump suction tube, standby or operation due to the escape of gas caused by the water level of the pump tank decreased, the pump tank automatically connected to the vacuum tank, so that the level remains at the required height. The installation position of the water drain is not affected by the position of the water pump.

Composition of AS Type devices, vacuum tank (with pressure switch and level switch)

Pump tank (level switch)

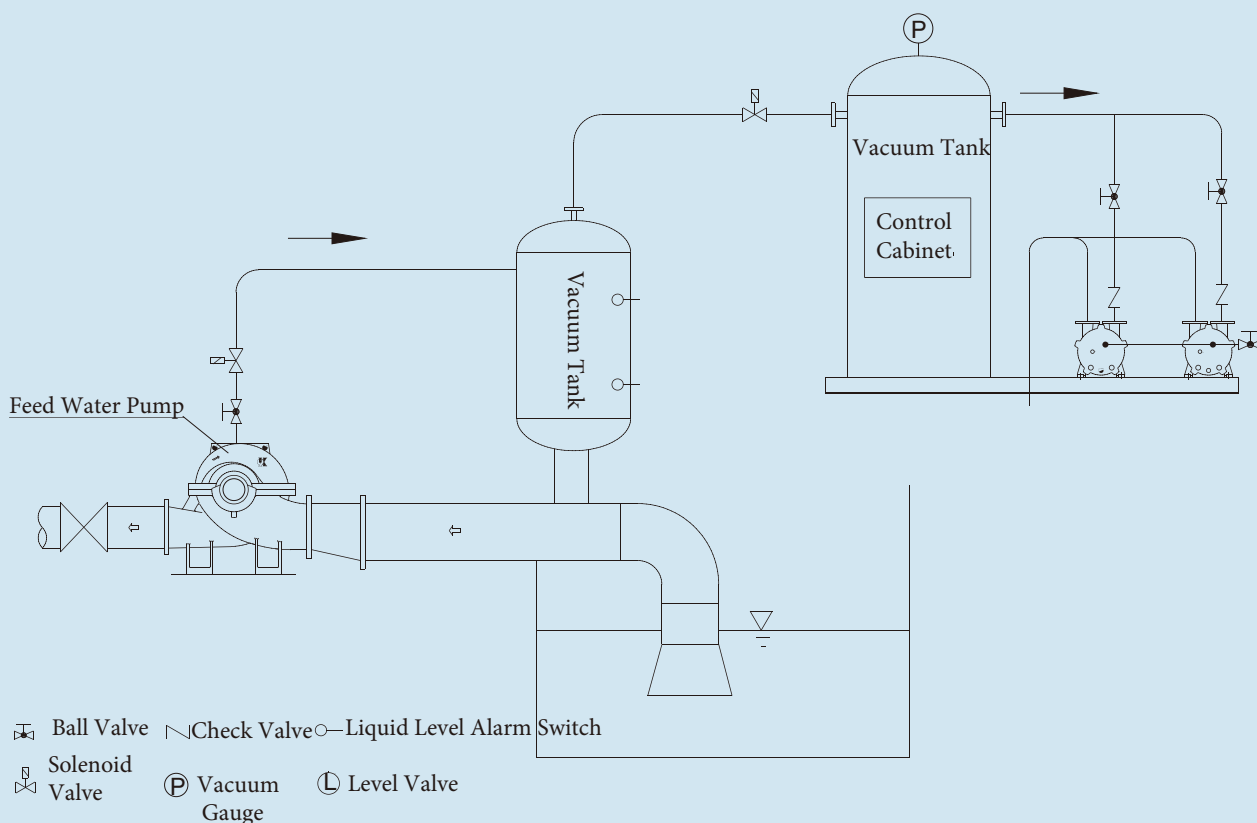
Water ring vacuum pump (2 as standard)

Solenoid valves, system valves and lines

Control cabinet



YS-AS Type Automatic Vacuum Water Diversion Process Diagram



General supply scope: dotted line equipment and valves on the pilot vacuum tube

Control cabinet



YS-AT type vacuum drainage device for pre-vacuuming and vacuum hold during operation of centrifugal pumps. Ideal for media containing a mixture of impurities, corrosive liquids and gas liquids, such as steel mill rotary well centrifugal pumps.

The vacuum tank is mounted on the centrifugal pump inlet pipe, and the opening and closing of the vacuum pump is controlled by the level switch, so that the vacuum tank level is kept within the required range. During pump standby or operation, the vacuum pump is activated, the upper limit is reached, and the vacuum pump is switched off due to a drop in the level caused by gas dissection exceeding the specified lower limit. Because the vacuum tank is mounted on the indented pipe, it can be used normally even if it is a mixture of liquid and gas. Vacuum tanks can improve the capacity of water and improve the suction performance of the pump. Several vacuum pumps can share a gas-water separator, saving installation space.

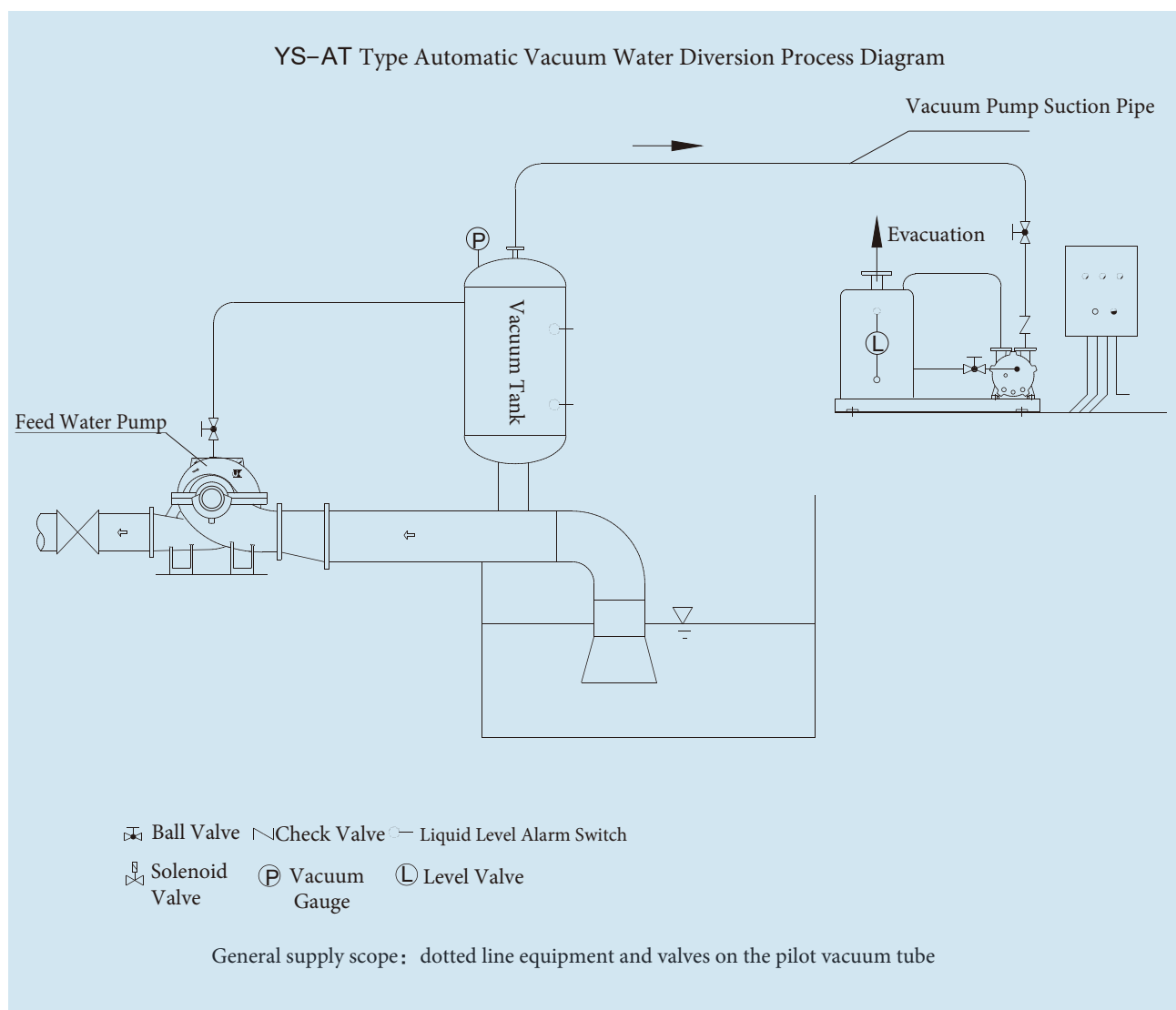
The composition of the AT-type device, vacuum tank with liquid level switch

Water ring vacuum pump (1 as standard, one water pump per pump with a water-draining device)

System valves and lines

Tank gas and water separator

Vacuum control box



YS-AW type vacuum water diversion device is used for pre-vacuuming before the start of centrifugal pump and vacuum keeping during operation. Especially suitable for use in sewage treatment plants.

Two water ring vacuum pumps are in use and in standby. The start and stop of water damaged vacuum pump is controlled by the electric contact vacuum meter of the vacuum tank. The electric contact vacuum meter sets the negative pressure range of the vacuum tank. The high and low level switch of the vacuum tank controls the automatic valve of the main circuit of the vacuum pipe and the automatic valve of the vacuum tank, so that the liquid level in the vacuum tank is always within the set range. The level switch (provided by the user) on the liquid level detection tank (provided by the user) controls the automatic valve (provided by the user) on the branch pipeline. When the liquid level drops to the low level switch position, the automatic valve of the corresponding pumping branch pipeline will open, and the water will be diverted to the high level switch and then the automatic valve will be closed.

AW type device composition, vacuum tank (with level gauge and level switch)

Water ring vacuum pump (standard 2)

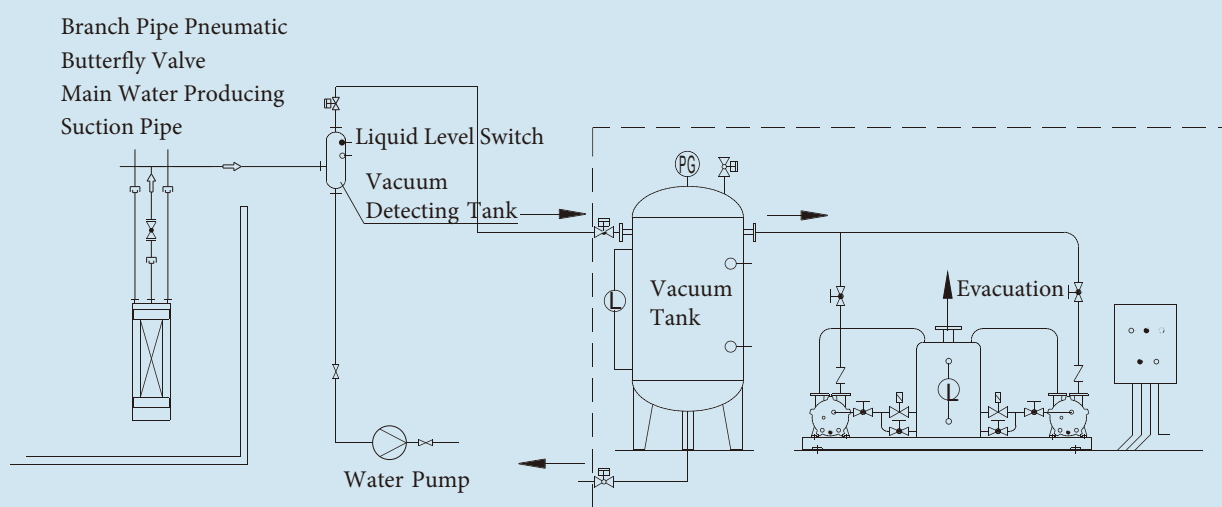
Entrance automatic on/off valve (optional), air release automatic on/off valve 1, drainage automatic on/off valve 1

Solenoid valves, system valves and piping

Gas and water separator

Control cabinet

YS-AW Type Automatic Vacuum Water Diversion Process Diagram



 Ball Valve
  Check Valve
  Liquid Level Alarm Switch
 Solenoid Valve
  Electric Contact Vacuum Gauge
  Level Gauge
  Automatic Switch Valve

General supply scope: dotted line equipment and valves on the pilot vacuum tube

KZF Series Negative Pressure Station

Overview

KZF series negative pressure station is a complete set of system with one or two water ring vacuum pumps as vacuum acquisition equipment and vacuum tanks as vacuum storage equipment. For frequent use of vacuum sources and the required amount of pumping is not very large, the system than the direct use of vacuum pumps greatly save energy, and effectively improve the life of vacuum pumps.

The device can be used as a vacuum source for all kinds of large and medium-sized hospitals in China to provide medical gas center station, and is widely used in the chemical and pharmaceutical industry vacuum stations, light industry canning systems, automotive industry rubber engineering parts negative pressure molding, coal mining Impregnation of flame retardant conveyor belts and vacuum sources in the foundry industry, etc.

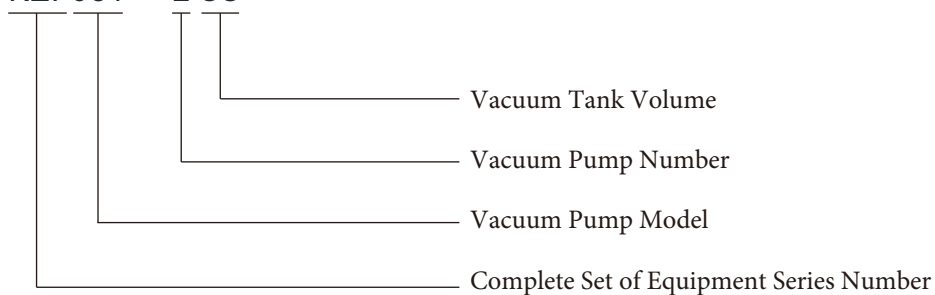


Product Feature

- 1、High efficiency and energy saving: KZF series negative pressure station using my company's 2BVX series of water ring vacuum pumps, high efficiency, energy-saving effect is obvious;
- 2、Complete varieties: specifications, and according to user requirements for special design;
- 3、Optimize the design: complete sets of unit design structure tight and reasonable, simple installation, easy maintenance. The configuration of the common base, small vibration, low noise, safe and reliable operation;
- 4、The unit is equipped with gas and water separators, can provide working water for vacuum pump operation, save water and reduce waste water pollution to the environment;
- 5、Automatic control, safe and reliable: the device can be fully automatic operation after start-up, no need for dedicated duties. An unexpected power outage does not affect the system vacuum. The vacuum range can be adjusted on-site according to the requirements of use. The alarm issues a warning if the vacuum level is below the adjustment value.

Model Represent Method

KZF061 — 2 C3



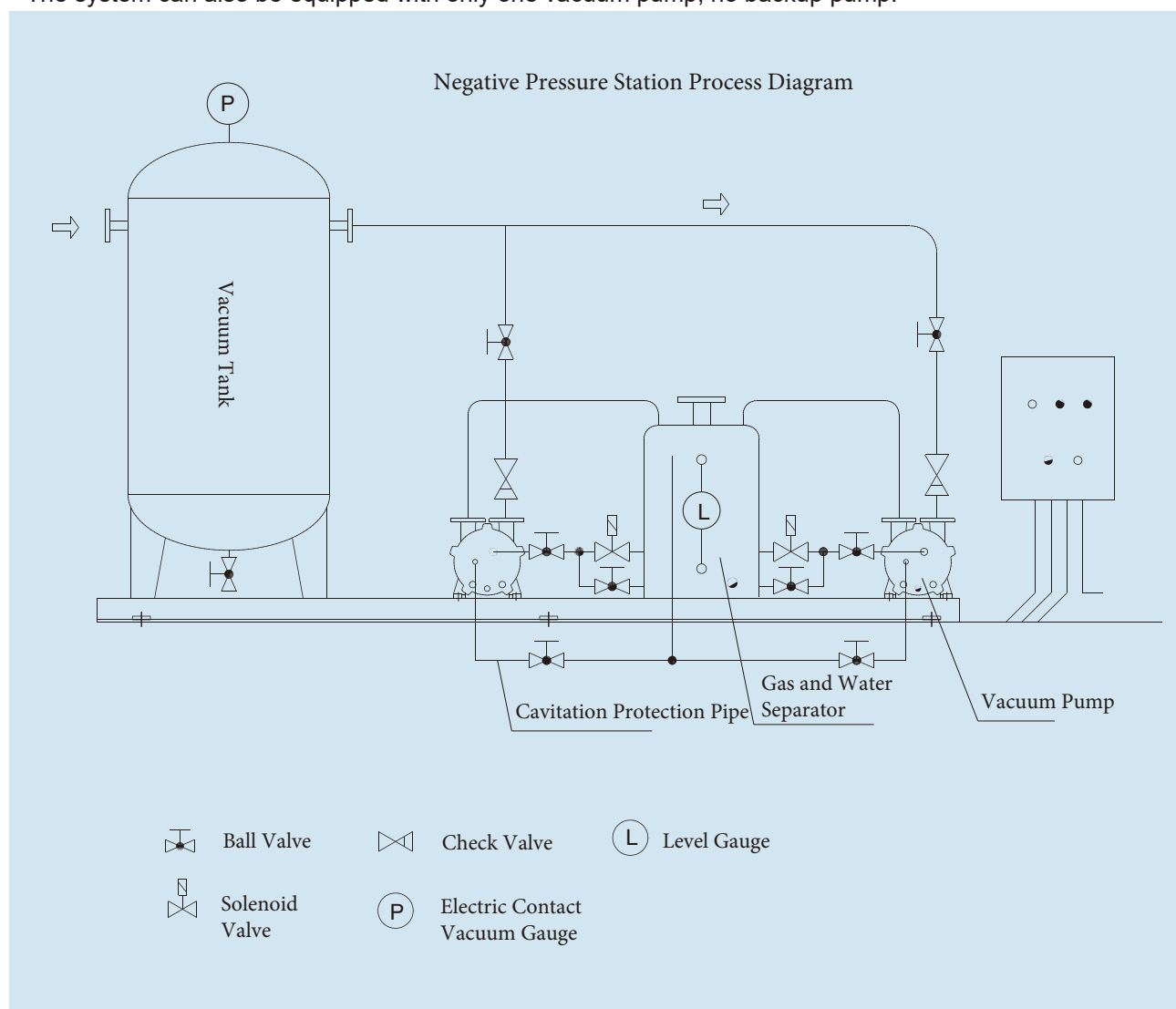
Unit Working Principle

The negative pressure station is mainly composed of water ring vacuum pump, vacuum, gas-water separator, system pipeline, instrument valve and control cabinet. The vacuum pump and the gas-water separator are connected by the exhaust pipe, the working water supply pipeline and the cavitation protection pipeline. The working water supply pipeline is equipped with electromagnetic and manual adjustment. The pipe between the vacuum pump and the vacuum tank is equipped with a check ball. The vacuum tank is equipped with an electric contact vacuum gauge to control the start and stop of the vacuum pump. Two vacuum pumps, one for the work pump, the other for the standby pump, timing switch, alternate work, when the need to pump again when only the work of the pump.

First set of vacuum system of upper and lower limit (such as the limit is set to 0.08 MPa, lower limit set to 0.06 MPa), start the system, vacuum pump to start work, until the vacuum degree of vacuum tank reach the ceiling to 0.08 MPa, vacuum pump automatically stops running, vacuum tank vacuum by vacuum check automatic cut-off, such as vacuum degree of vacuum tank because of work demand fell to below the lower limit value to 0.06 MPa, the vacuum pump automatic start, until the vacuum inside the tank vacuum at the ceiling to 0.08 MPa, so run automatically. The vacuum degree in the vacuum tank is always maintained between the upper and lower limits. If the work demand is large, the vacuum degree in the vacuum is lower than the lower limit for more than a certain time, and a single vacuum pump cannot pump the vacuum degree in the tank above the lower limit, another vacuum pump will automatically start, until it exceeds the upper limit.

Two vacuum pumps can also be switched to manually start and stop.

The system can also be equipped with only one vacuum pump, no backup pump.



Performance Parameter Table

Model	Vacuum Tank Volume m ³	Vacuum Pump				
		Pump Type	Gas Capacity m ³ /min	Motor Power kW	Extreme Vacuum MPa	Rotating Speed r/min
KZF060—2C0.3	0.3	2BVX060	0.45	1.1	−0.098	2840
KZF061—2C0.5	0.5	2BVX061	0.87	1.5	−0.098	2840
KZF071—2C1	1	2BVX071	1.83	4	−0.098	2890
KZF110—2C1.5	1.5	2BVX110	2.75	4	−0.098	1440
KZF110—2C2	2	2BVX110	2.75	4	−0.098	1440
KZF111—2C3	3	2BVX111	3.83	5.5	−0.098	1445
KZF121—2C5	5	2BVX121	4.67	7.5	−0.098	1445

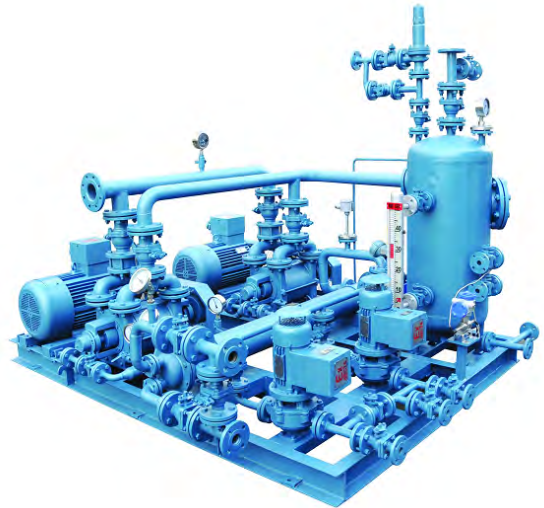
Notice:

- 1、The table model for the standard series of products. According to the user to order a special type of vacuum tank, optional vacuum pump, custom-made interface flange size.
- 2、The table vacuum pump for the recommended product models, but also according to the actual situation to choose the appropriate amount of vacuum pump.
- 3、Vacuum tank can be designed according to the needs of users on-site for horizontal or vertical structure, please indicate at the time of ordering.

2BW Series Water Ring Vacuum Pump and Compressor Complete Set of Devices

Overview

2BW series of water ring vacuum pump and compressor complete sets of devices, is my company's water ring vacuum pumps and compressors for the host set of products. Complete sets include pumps, gas and water separators, heat exchangers, internal pipelines, instrument valves, the overall base. Widely used in chemical, pharmaceutical and other industries, especially suitable for toxic, flammable, explosive gas pumping.



Product Feature

- 1、The unit integrated supply, complete functions, to meet the user's use requirements;
- 2、One base, convenient on-site installation and commissioning. The unit vibration is small, the noise is low, the operation is safe and reliable;
- 3、Working fluid (water, methanol, ethylene glycol, toluene, xylene, acetone, dichloromethane, diesel, etc.) closed circulation, reducing environmental pollution;
- 4、Gas and water separator level control has a variety of ways to meet different requirements for field use.

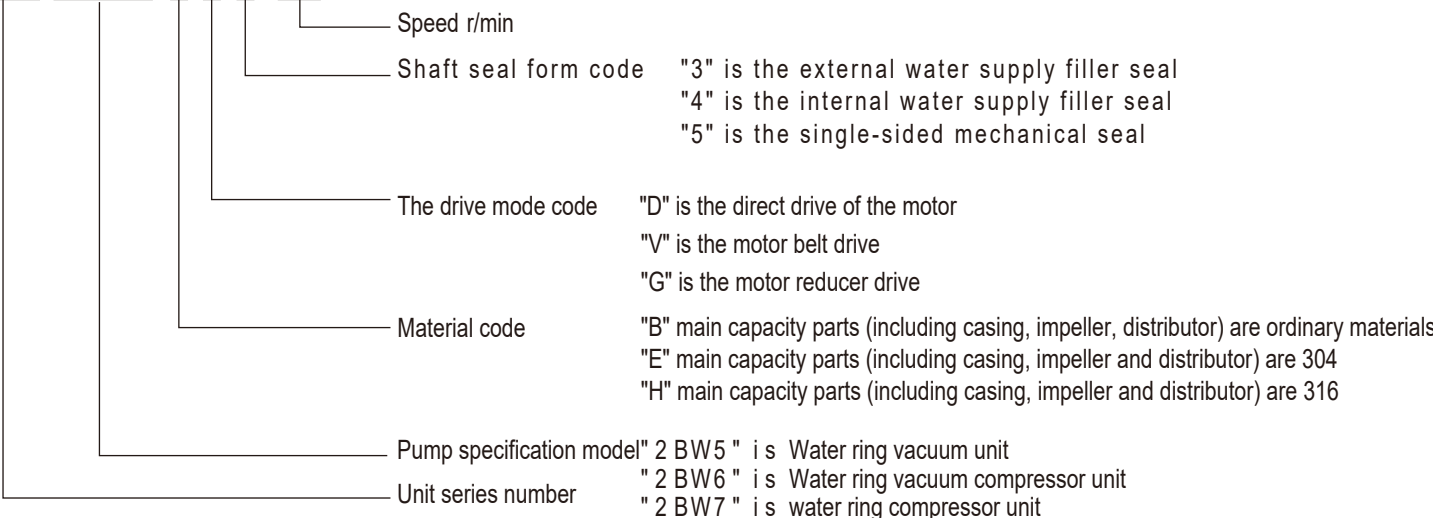
Manual control: when the unit is running, a small amount of working fluid will become steam with the gas discharge caused by the drop in the level, through manual adjustment of the rehydration valve, to the unit to replenish the working fluid.

Mechanical automatic control: the air and water separator is installed with mechanical automatic rehydration valve and mechanical automatic drain valve, automatic rehydration or discharge.

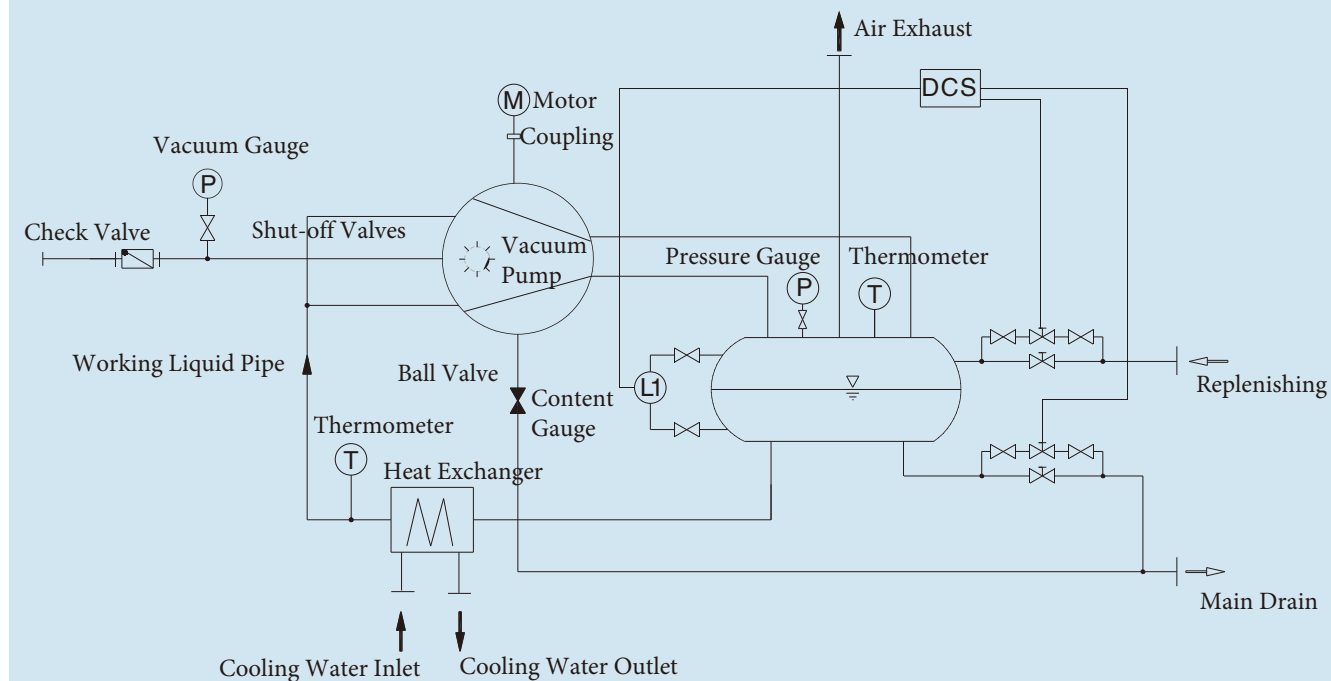
Electric automatic control: the gas and water separator is installed with a level sensor, rehydration solenoid valve and drain solenoid valve. According to the change of the level, the automatic control rehydration solenoid valve and the drain solenoid valve are opened or closed, and the control level is within the required range.

The Complete Set of Model Represent Method

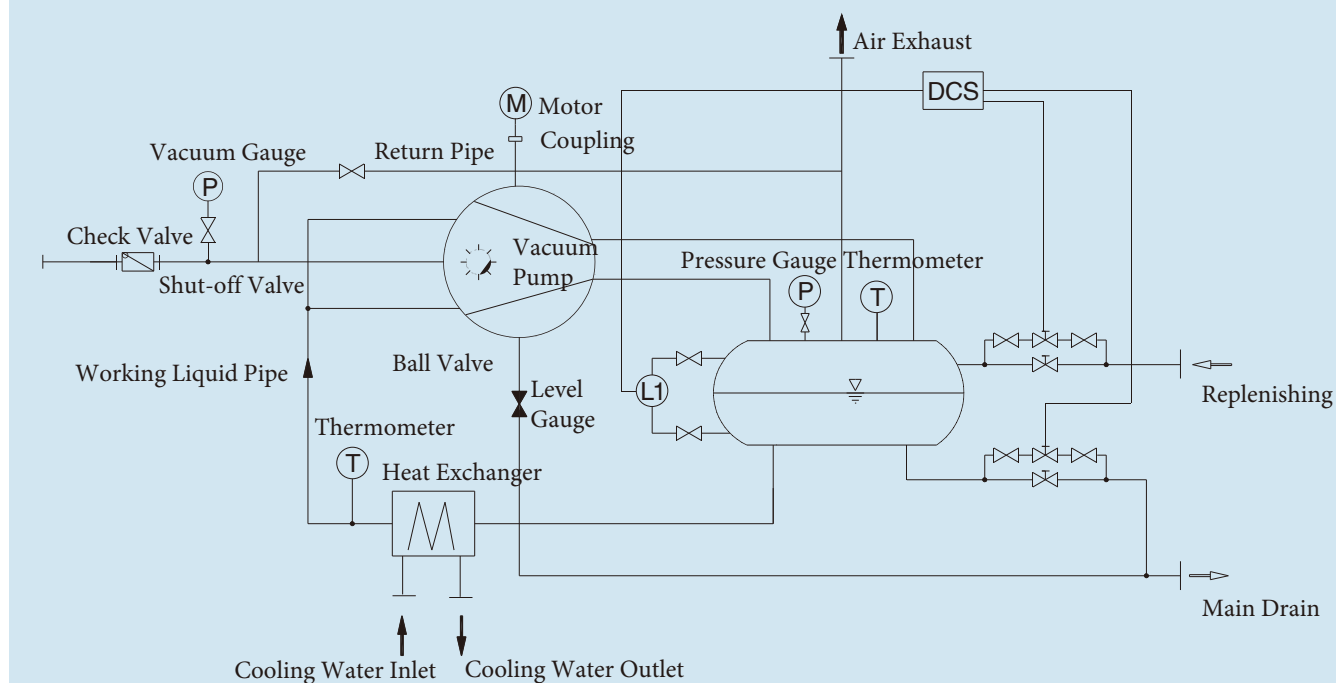
2BW5 35 3 - 0 E D 4 - 590



Complete Set of Device Process Diagram



2BW5 Complete Set of Device Process Diagram



2BW7 Complete Set of Device Process Diagram



Attachment Description

Number	Name	Installation Position	Function Description
1	Vacuum Check Valve	Pump Suction Port	Prevents the media and working fluid from reflowing when the vacuum pump or compressor is shut down
2	Vacuum Gauge	Pump Suction Port	The pressure of the pump suction port is displayed in place. Depending on the automation control requirements, pressure sensors are available
3	Filter	Pump Suction Port	Avoid foreign objects in the system and lines from entering the pump. General units should be installed at the beginning of operation
4	Rehydration Valve	Gas and Water Separator Rehydration Line	Replenish the unit with the work fluid and adjust the rehydration volume. Manual valves, mechanical automatic valves and electric valves are available
5	Drain Valve	Gas and Water Separator Overflow Line	Drain the unit with too much work fluid. Manual valves, mechanical automatic valves and electric valves are available. Conditions allow for the use of capacity
6	Content Gauge	Gas and Water Separator	Display level, optional glass plate, glass tube type, magnetic remake. The magnetic remake can be equipped with a level alarm switch and a level sensor
7	Pressure Gauge	Gas and Water Separator	The pressure of the vacuum compression and the compressor gas and water separator is displayed in place
8	Vacuum Pressure Gauge	Pump Water Supply Line (Between Gas and Water Separators and Pump)	Show the pressure of the working fluid in place
9	Thermometer	Pump Water Supply Line (Between Gas and Water Separators and Pump)	Show the operating fluid temperature in place
10	Heat Exchanger	Pump Water Supply Line	Cool the work fluid
11	Booster Pump	Pump Water Supply Line	Installation is generally not required when the supply of working fluid is insufficient or when the resistance of the working fluid line is large
12	Cavitation Protection	Between Gas and Water Separators and Pump	When the suction pressure is close to the saturated steam pressure of the working fluid, the cavitation protection line protects the overflow from cavitation damage
13	Balance Line	Between Suction and Discharge Line	The compressor unit is fitted with a balance tube and corresponding valve
14	Check Valve	Exhaust Line	The compressor unit installs a stop valve to avoid reflow
15	Gate Valve	Suction Lines, Exhaust Lines, Working Fluid Line	Multiple pumps are used in parallel in the unit and isolated between pump

2BW complete sets of devices are non-standard products, according to the specific requirements of customers special design. Accessories should be selected according to the operating conditions of the use requirements, other such as separators, ejectors, condensers, etc. also provide support. In the case of guaranteed use of functions, the configuration should be as simple as possible to improve the reliability of unit operation.

Power Plant Water Ring Vacuum Pump Complete Set of Devices

Overview

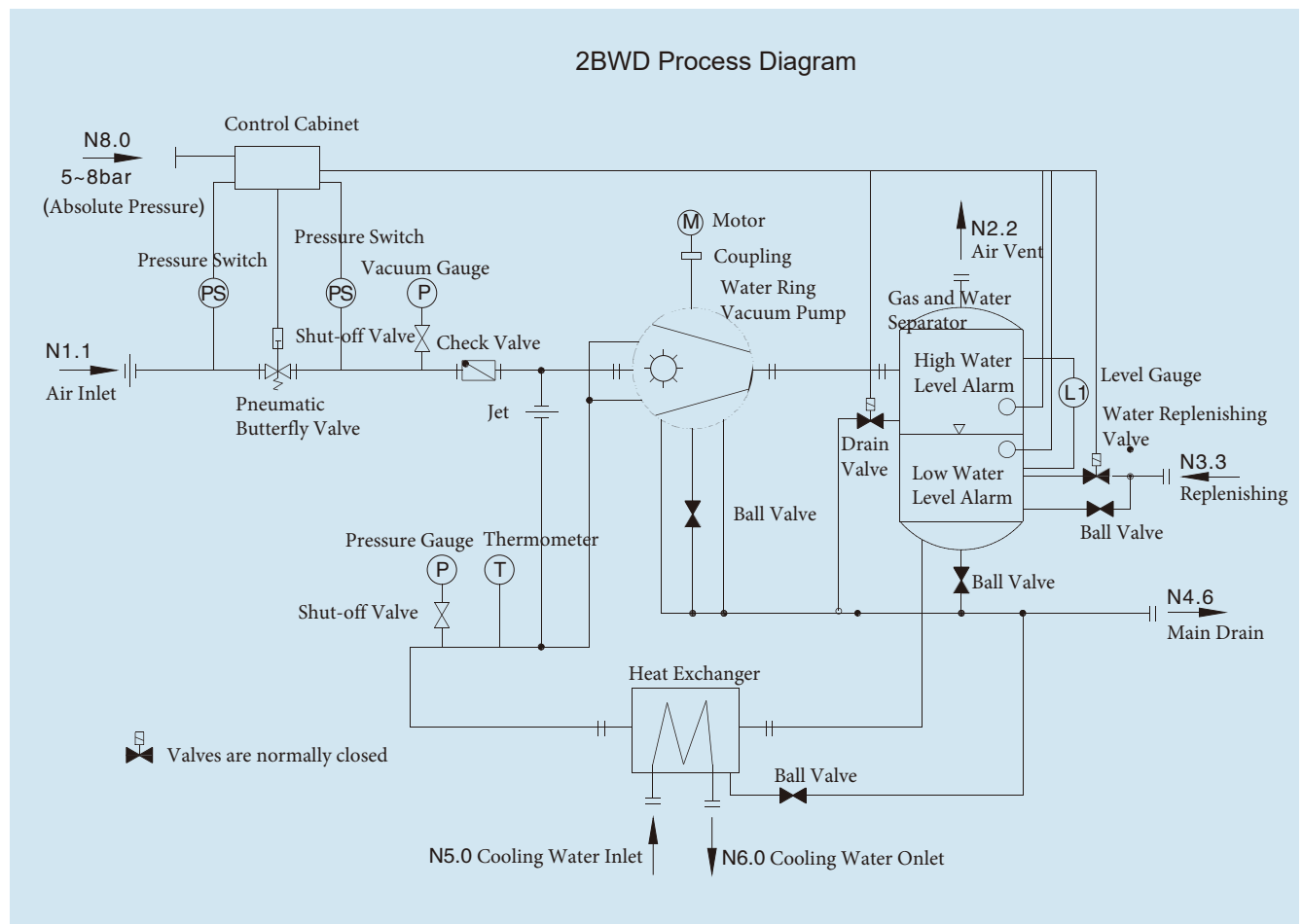
The water ring vacuum pump complete set of devices is a closed cycle unit which is applied to the vacuum pumping of the condenser of the power station. In the start-up vacuuming phase, the vacuum time of the unit is significantly shorter than that of vacuum equipment such as steam injection pumps. During the vacuum phase, the pumping capacity of the equipment changes in sync with the back pressure of the condenser, whether in summer, winter or peak conditions, always ensuring optimum power for the generator set. Simple automatic control and reliable structural design ensure that the condenser works properly. The unit is efficient, the maintenance quantity is small, and the operating cost is low. Water ring vacuum pump complete sets of devices are widely used in both water-cooled units and air-cooled units.

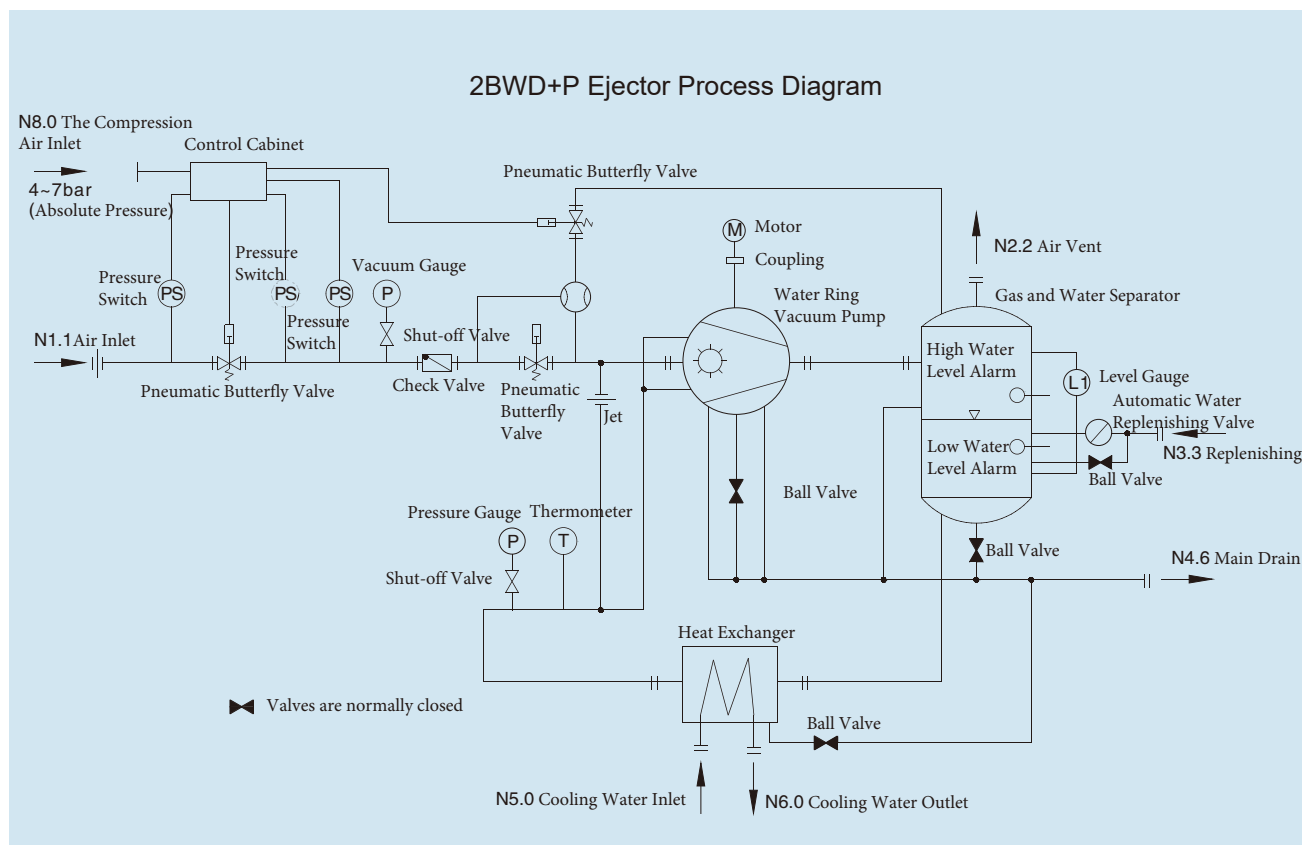
Water Ring Vacuum Pump Complete Set of Devices Represent Method

For example: BWD353-0EK4-590

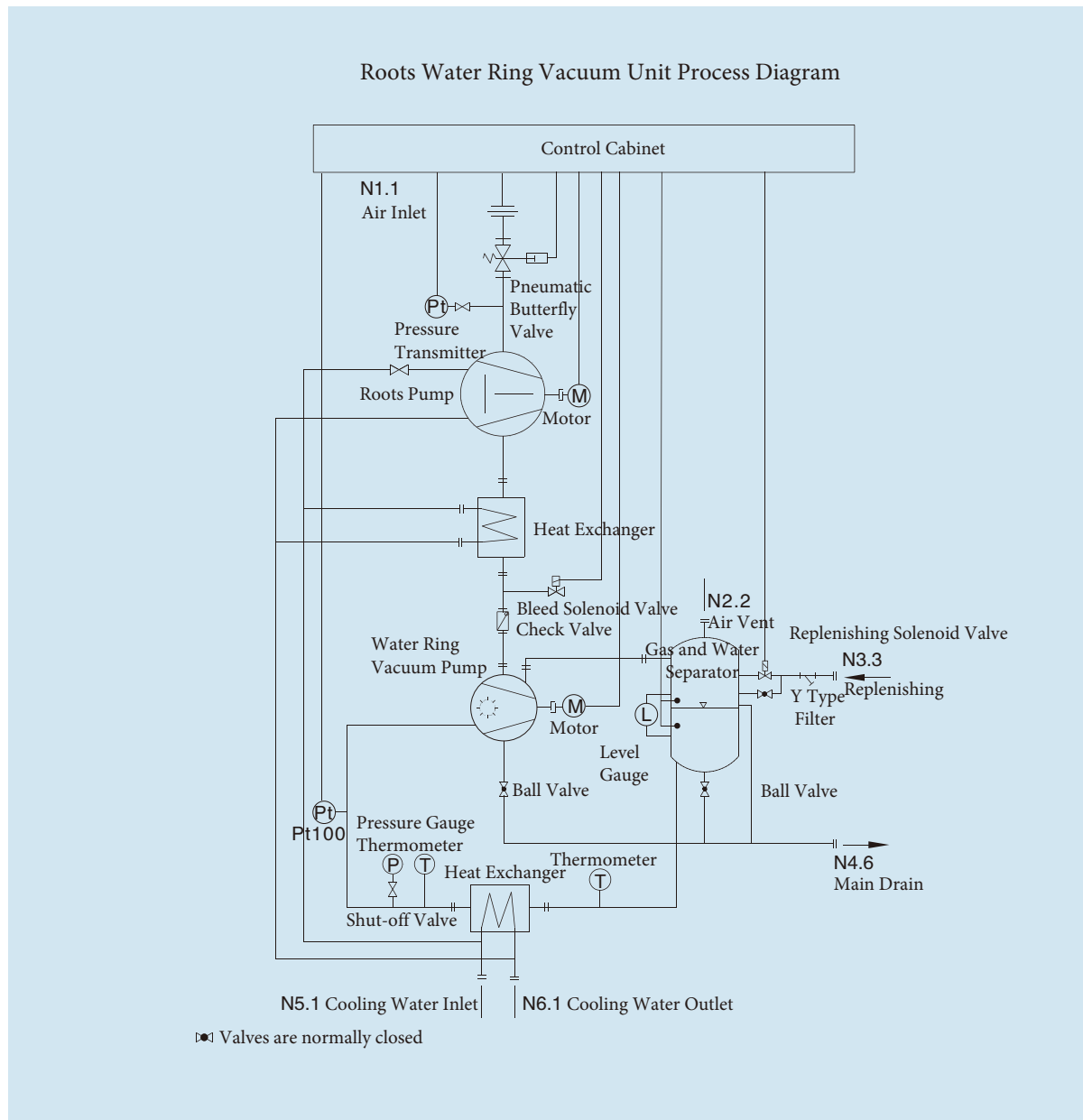
2BWD	Vacuum pump unit code (with 2BEX series pumps)				
KVA-D	Vacuum pump unit code (with KVA series pumps)				
KVC-D	Vacuum pump unit code (with KVC series pumps)				
KVDP-D	Vacuum pump unit code (with KVDP series pumps)				
	353	Pump specification code			
		0	Pump minimum suction absolute pressure 33hPa		
			B	Casing, impeller, distributor material is cast iron carbon steel	
			E	The impeller material is 304	
			H	The impeller material is 316	
			F	The impeller material is 316L	
				K	The unit is not equipped with an atmospheric ejector
				L	The unit is equipped with an atmospheric ejector
					3 External water supply filler seal
					4 Internal water supply filler seal
					5 Single-sided internal water supply mechanical seal
					6 Single-sided external water supply mechanical seal
					590 Pump speed

MP350-Roots Water Ring Unit





The 2BWD-P ejector complete set has sufficient pumping amount under very low absolute pressure of inhalation, and when the power station is running at peak condition, the use of this unit can enable the condenser to establish a very low back pressure and improve the efficiency of the generator set. The ejector does not consume unit power and can be automatically put in and out according to changes in operating conditions. e.g. all water ring vacuum pumps at 101. At an ambient pressure of 3kPa, when the cooling water temperature is 15C, the limit vacuum can only be pumped to 198kPa, at which point the water in the pump cavity is near boiling. The 2BWD-P ejector unit can easily pump to 100.3kPa. At this time, the pump cavity is in a 90kPa, much higher than the vaporization pressure at this water temperature, there will be no cavitation, the pump can run smoothly.

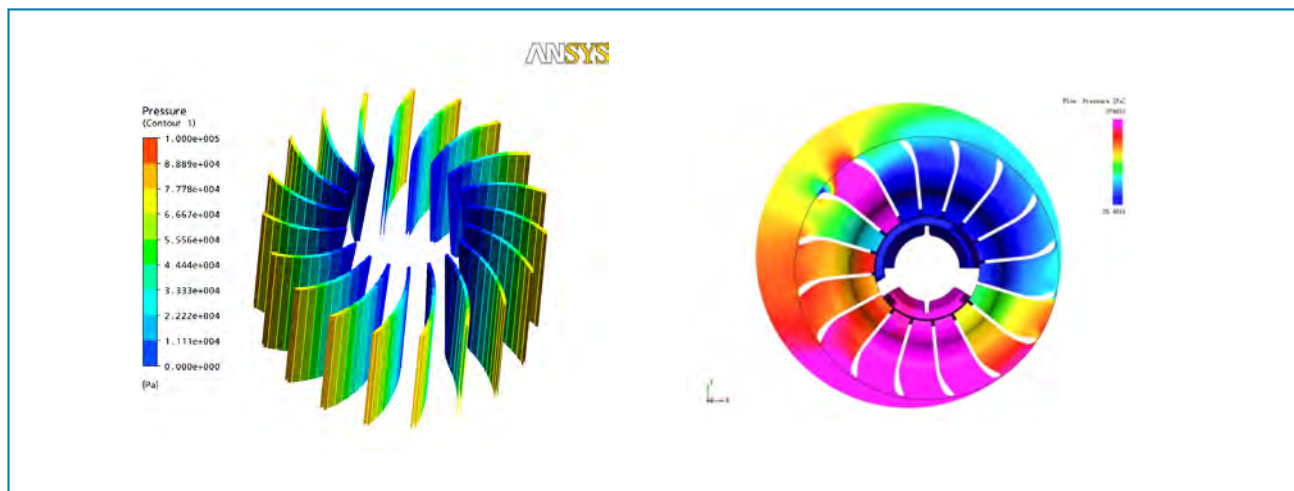


The Roots water ring vacuum unit is a series of Roots vacuum pumps and small water ring vacuum pumps. The Roots pump is a vacuum pump that can withstand high pressure difference and high compression ratio and can operate over a wide pressure range. Especially in the bad working conditions in summer, the rise in water temperature has little effect on the performance of the unit, the pumping efficiency is higher than that of the water ring vacuum unit, and the pressure is stable. The Roots water ring vacuum unit is more economical and practical for the characteristics of the need to stabilize vacuum in the condenser.

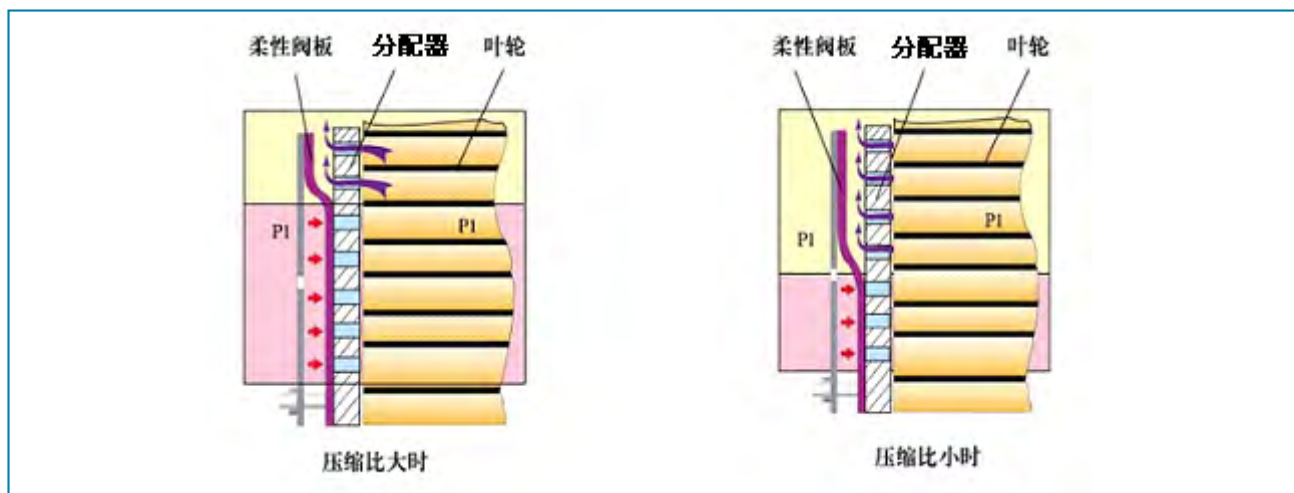


Advanced Performance

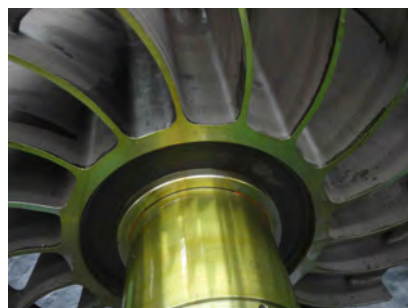
Using ANSYS software to analyze the hydraulic model, it widens the high-efficiency operation area and improves the hydro-efficiency.



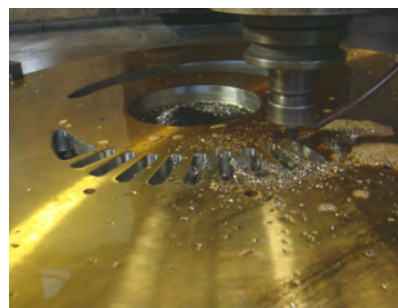
The pump structure is suitable for the variable operating conditions of the power plant, and the unique flexible exhaust port design. Adapt to different pressure areas, automatically adjust the exhaust angle, avoid over compression, effectively reduce energy consumption, so that the pump in the full suction range can operate efficiently.



Excellent Manufacture



The overall casting impeller, the surface is smooth, the pattern line and the design is completely consistent. The use of stainless steel material can enhance impeller strength and improve corrosion resistance.



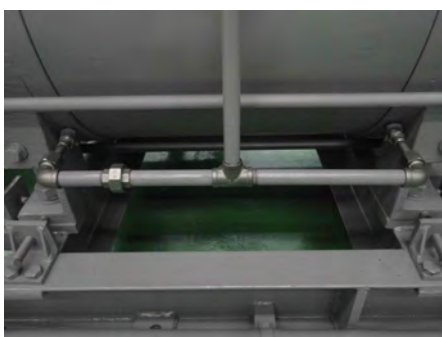
The distributor uses CNC machine tool processing, the exhaust hole position is accurate, to ensure the pump operating efficiency.

Optimized Unit Design



Two Water Curtains Pre-cooled Air Intake

Vacuum pump suction of gases from the condenser are most of the water vapor, in the inlet of the pump is equipped with spraying device, the formation of the first water, distributor in the intake by working liquid filling water to form the name of the second water diffusion pump cavity, two water will be drawn from the condenser water vapor condensation, non-condensable gas cooling contraction, gas volume shrinking, greatly improving the pump suction ability.



Anti-cavitation Device

At the initial stage of pump compression, the appropriate gas is introduced to form a thin gas protective film on the surface of the impeller, which effectively improves the anti-cavitation ability of the pump in high no back pressure, safe and vacuum operation, and prevents cavitation. The vibration and noise are reduced and the service life of the impeller is prolonged.



Overflow Setting

Connecting tube design, no need to set up overflow valve, no back pressure, safe and reliable.



Rehydration Device

High-pressure rehydration electromagnetic and liquid level switch chain, timely rehydration, to ensure that the device will not run without water.

Perfect and Reliable Configuration



Well-known manufacturers of automatic valves:
fast switching, reliable sealing



Pressure switches from well-known brands:
accurate instructions, reliable and durable

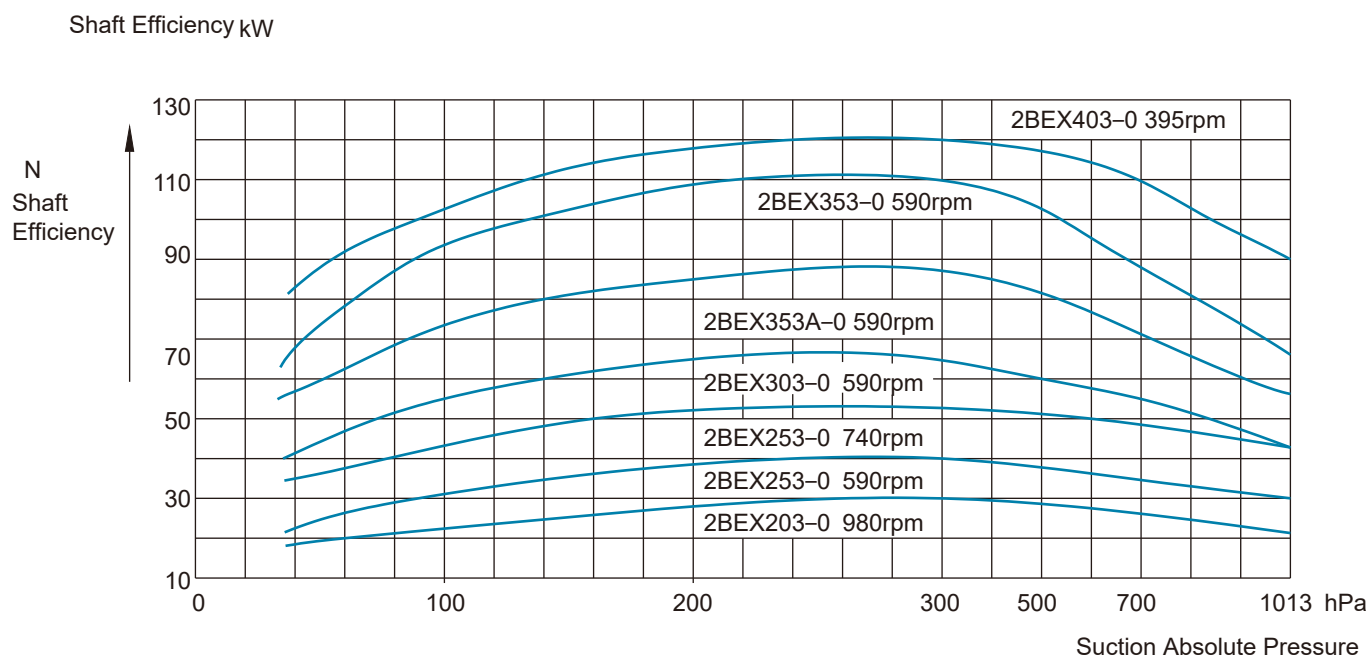
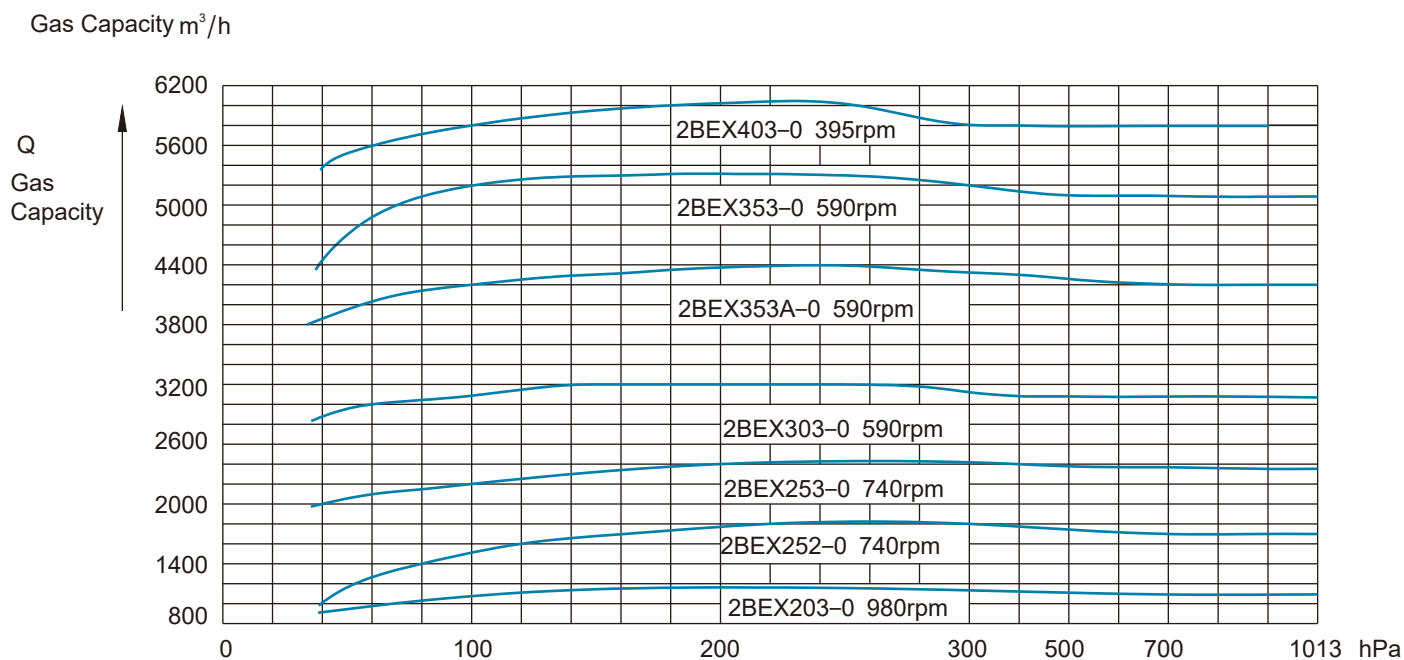


Well-known brands of heat exchangers:
compact design, high efficiency of heat transfer



Magnetic plate level meter: the scene display is
clear, far-transmission level alarm

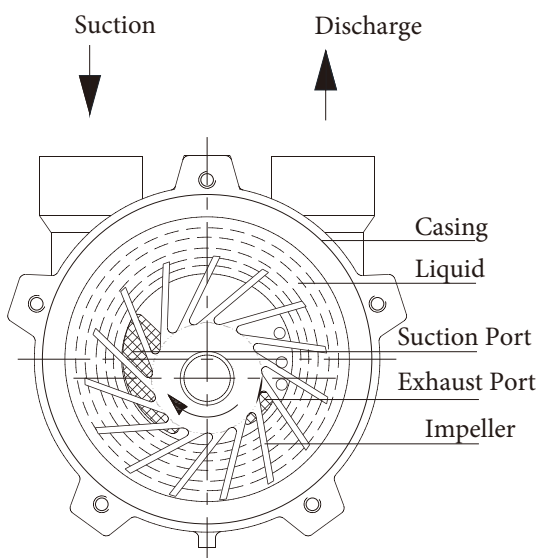
Complete Set of Unit Performance Curve



The performance of the above column is based on the saturated air of the inhaled gas at a suction temperature of 20°C . The operating fluid temperature is 15°C and the exhaust pressure is 1013.25 hPa for a standard atmospheric pressure.

Working Principle of Water Ring Vacuum Pump

The impeller and the Casing are eccentric, the ends are sealed by the dispenser, the appropriate amount of liquid is injected into the pump, and when the impeller rotates, a rotating liquid ring with a thickness close to equal thickness is formed along the inner wall of the pump. The inner surface of the liquid ring and the surface of the impeller hub and the end face of the dispenser form a crescent-shaped working cavity, which is divided into several cavities of varying size by impeller blades, and when the impeller rotates, the volume of the small cavity on the suction side gradually expands and the pressure in the cavity decreases. The cavity is inhaled from the outside through the suction hole, the cavity is gradually swirling to the exhaust side, the cavity volume is gradually reduced, the gas is compressed, when the pressure reaches atmospheric pressure, the gas is discharged through the exhaust outlet, thus completing the three working stages of inhalation, compression and exhaust. When working, a portion of the working fluid is discharged with the gas, so a certain amount of fresh working fluid needs to be injected into the pump continuously. To ensure the normal operation of the pump. The most commonly used working fluid is water.



Working principle diagram of water ring vacuum pump

Common Gas Data Sheet

Gas Related Data							
Name	Molecular	Molecular Weight	Density 20°C 101.325kPa	Name	Molecular	Molecular Weight	Density 20°C 101.325kPa
Air (dry)		28.9626	1.2041	Acetylene	C ₂ H ₂	26.038	1.083
Nitrogen	N ₂	28.0135	1.1646	Benzene	C ₆ H ₆	78.114	3.2476
Oxygen	O ₂	31.9988	1.3302	Carbon Monoxide	CO	28.0106	1.165
Helium	He	4.0026	0.1664	Carbon Dioxide	CO ₂	44.00995	1.829
Hydrogen	H ₂	2.0159	0.0838	Nitric Oxide	NO	30.0061	1.2474
Krypton	Kr	83.8	3.4835	Nitrogen Dioxide	NO ₂	46.0055	1.9121
Xenon	Xe	131.3	5.4582	Nitrous Oxide	N ₂ O	44.0128	1.8302
Neon	Ne	20.183	0.83914	Hydrogen Sulfide	H ₂ S	34.07994	1.4169
Argon	Ar	39.948	1.6605	Hydrocyanic Acid	HCN	27.0258	1.1235
Methane	CH ₄	16.043	0.6669	Oxygen Carbon Sulfide	COS	60.0746	2.4973
Ethane	C ₂ H ₆	30.07	1.25	Ozone	O ₃	47.9982	1.9952
Propane	C ₃ H ₈	44.097	1.8332	Sulfur Dioxide	SO ₂	64.0628	2.726
N-butane	C ₄ H ₁₀	58.124	2.4163	Fluorine	F ₂	37.9968	1.5798
Isobutane	C ₄ H ₁₀	58.124	2.4163	Chlorine	Cl ₂	70.906	2.9476
N-pentane	C ₅ H ₁₂	72.151	2.9994	Methyl Chloride	CH ₃ Cl	50.488	2.099
Ethylene	C ₂ H ₄	28.054	1.166	Chloroethane	C ₂ H ₅ Cl	64.515	2.6821
Propylene	C ₃ H ₆	42.081	1.7495	Ammonia	NH ₃	17.0306	0.708
Butene-1	C ₄ H ₈	56.108	2.3326	Freon - 11	CCl ₃ F	137.3686	5.711
Malebutene-2	C ₄ H ₈	56.108	2.3327	Freon - 12	CCl ₂ F ₂	120.914	5.0269
Antibutylene-2	C ₄ H ₈	56.108	2.3327	Freon - 13	CClF ₃	104.4594	4.3428
Isobutylene	C ₄ H ₈	56.108	2.3327	Freon - 113	CCl ₂ FCClF ₂	187.3765	7.79

Pressure Unit Conversion Table

Pressure Unit	MPa	bar	kgf/cm ²	atm	mmH ₂ O	mmHg	lbf/in ² (psi)
1MPa	1	10	10.1972	9.8692	101.97×10 ³	7.5006×10 ³	145.04
1bar	0.1	1	1.01972	0.98692	10.197 × 10 ³	750.06	14.504
1kgf/cm ²	0.098067	0.98067	1	0.96784	10 × 10 ³	735.56	14.233
1atm	0.10133	1.0133	1.0332	1	10332	760	1.4223 × 10 ⁻³
1mmH ₂ O	9.8067 × 10 ⁻⁶	98.067 × 10 ⁻⁶	0.1 × 10 ⁻³	96.784 × 10 ⁻⁶	1	73.556 × 10 ⁻³	1.4223 × 10 ⁻³
1mmHg	0.13332 × 10 ⁻³	1.3332 × 10 ⁻³	1.3595 × 10 ⁻³	1/760	13.595	1	19.337 × 10 ⁻³
1lbf/in ² (psi)	6.8948 × 10 ⁻³	68.948 × 10 ⁻³	70.307 × 10 ⁻³	68.046 × 10 ⁻³	703.07	51.715	1

1kgf/cm²=1at=Engineering Atmospheric

Pressure 1mmHg=1Tor

1Pa=1N/m²

Water Saturation Pressure Table

Temperature	Pressure	Temperature	Pressure	Temperature	Pressure	Temperature	Pressure	Temperature	Pressure
t	p	t	p	t	p	t	p	t	p
°C	MPa	°C	MPa	°C	MPa	°C	MPa	°C	MPa
0	0.000 611 3	20	0.002 338 5	40	0.007 381 1	60	0.019 933	80	0.047 376
1	0.000 657 1	21	0.002 487 7	41	0.007 784	61	0.020 873	81	0.049 324
2	0.000 705 9	22	0.002 644 4	42	0.008 205 4	62	0.021 851	82	0.051 342
3	0.000 758	23	0.002 810 4	43	0.008 646 3	63	0.022 868	83	0.053 428
4	0.000 813 5	24	0.002 984 6	44	0.009 107 5	64	0.023 925	84	0.055 585
5	0.000 872 5	25	0.003 169	45	0.009 589 7	65	0.025 024	85	0.057 818
6	0.000 935 2	26	0.003 362 5	46	0.010 094	66	0.026 163	86	0.060 119
7	0.001 001 9	27	0.003 567	47	0.010 62	67	0.027 347	87	0.062 499
8	0.001 072 8	28	0.003 781 4	48	0.011 171	68	0.028 576	88	0.064 958
9	0.001 148	29	0.004 007 8	49	0.011 745	69	0.029 852	89	0.067 496
10	0.001 227 9	30	0.004 245 1	50	0.012 344 6	70	0.031 178	90	0.070 121
11	0.001 312 6	31	0.004 495 3	51	0.012 97	71	0.032 549	91	0.072 823
12	0.001 402 5	32	0.004 757 8	52	0.013 623	72	0.033 972	92	0.075 614
13	0.001 497 7	33	0.005 033 5	53	0.014 303	73	0.035 448	93	0.078 494
14	0.001 598 5	34	0.005 322 9	54	0.015 012	74	0.036 978	94	0.081 465
15	0.001 705 3	35	0.005 626 3	55	0.015 752	75	0.038 565	95	0.084 533
16	0.001 818 3	36	0.005 945 3	56	0.016 522	76	0.040 205	96	0.087 688
17	0.001 937 7	37	0.006 279 5	57	0.017 324	77	0.041 905	97	0.090 945
18	0.002 064	38	0.006 629 8	58	0.018 159	78	0.043 665	98	0.094 301
19	0.002 197 5	39	0.006 996 9	59	0.019 028	79	0.045 487	99	0.097 759
								100	0.101 325

Water Ring Vacuum Pump Selection Parameter Table

Customer Information	Company Name:				Contact:			
	Project name:				Phone:		Fax:	
Media Type					Air and Water Separator	Type	Overhead Type	☐
Air Conditions	Suction Amount m ³ /h	Normal:	Maximum:			Material	Side Tank Type ☐	
	Suction Pressure hPa abs	Normal:	Minimum:					
	Extreme Pressure hPa abs					Suction Connecting Pipe	With ☐	Not With ☐
	Temperature °C	Normal:	Maximum:		Material			
Exhaust Pressure hPa abs					Exhaust Connection Tube	With ☐	Not With ☐	
Working Fluid	Working Fluid Type				Heat Exchanger	Material		
	Working Fluid Temperature °C					Type	Plate	☐
	Working Fluid Viscosity					Model	Shell and Tube	☐
	Working Fluid Density kg ³ /m						Shell or Tube Material	
	Working Fluid Recycling	Recycling ☐	Not Recycling ☐			Cooling Water	Kind	
	Other						Inlet Temperature	
Pump	Number					Inlet Pressure		
	Model							
Transmission Mode	Direct	☐			Impeller			
	Belt Wheel	☐				Casing		
	Reducer	☐				Distributor		
Shaft Seal	Shaft Seal Type	Filler Seal	☐		Pump Materials	Shaft		
		Single-sided Mechanical Seal	☐			Side Cover		
		Other	☐			Sleeve		
	Rinse Way	Rinse Inside	☐					
		Rinse Outside	☐					
Motor	Type				Base	Not Need	☐	
	Motor Power kW					Standard	☐	
	Motor Speed r/pm					Other	☐	
	Voltage/Frequency				Other			
	Explosion-proof Grade							
	Protection Grade							
	Insulation Grade							
Notice: 1. If you do not fill in the items, it will be deemed that there are no special requirements and can be made according to conventional products; 2. Please black out the selected items;								
Shanghai Kaiquan Pump Industry (Group) Co., Ltd. Contacts:					Phone:	Fax:		

Performance



Yangzijiang Pharmaceutical Group



Jiangxi China Tobacco Industry Co., Ltd.
Ganzhou cigarette factory



Sanju Chemical



Long Coal Group Yilan Mine



Guizhou Xingyi power plant 2 × 600MW unit



Shanxi Dongling Lead and Zinc Smelting Co., Ltd.



Yingkou Sanzheng Organic Chemistry Co., Ltd.



Wuxi Sharp Electronic Components Co., Ltd.

Where there is Kaiquan, there is water



上海凯泉泵业(集团)有限公司
SHANGHAI KAIQUAN PUMP (GROUP) CO., LTD.

Company Address: No. 4255/4287, Caoan
Highway, Jiading District, Shanghai
Company Website: www.Kaiquan.com.cn
Customer Service Hotline: 400-002-6600



YB/KAIQUAN ZKB-20191218