BAOSI VACUUM

设计&策划【鼎湖文化】 T: 0574 8817 2025

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If you want to know more about Baosi Vacuum Pump,
please kindly call for more detailed technical data. Thanks.

Official Account

Website

BAOSI VACUUM

NINGBO BAOSI ENERGY EQUIPMENT CO., LTD.

2022 PRODUCT CATALOGUE

VACUUM PUMP

OIL ROTARY VANE VACUUM PUMP

ROOTS VACUUM PUMP

SCREW DRY VACUUM PUMP

SCROLL VACUUM PUMP

VACUUM VALVES

OIL / VACUUM FLANGE AND FITTING

ENTERPRISE SPIRIT

LEARNING
Choose the right direction, learning by watching, listening and asking to digest and absorb.

PERSEVERANCE
Choose the spirit, adjust yourself and hold out to the end.

HARMONY
Choose a good, make happy and progress by communication, praise and humility.

PROFESSION
Choose perseverance, specialize in one field and get the career achievement.

CONTENTS

ABOUT US

TO GET YOUR SATISFACTION

NINGBO BAOSI ENERGY EQUIPMENT CO., LTD.

Ningbo Baosi Energy Equipment Co., Ltd. was founded in 2005, and in April 2015 the company began to issue stocks on the Shenzhen Stock Exchange (stock code: 300441). Headquartered in Chiang Kai -shek's hometown, holy land of Maitreya--- Fenghua.
The company bases on the compacted high-end precision parts manufacturing, extend to hign-end alloy materials, equipment as well as integrated systems to achieve the development goal, to be a modern enterprise with high-end manufacturing core technology and harmonious development.
The company takes Learn, Harmony, Perseverance and Profession for enterprise culture, and advocates Maitreya culture, promote the spirit of Maitreya.

BAOSI ESTABLISHED VACUUM GROUP

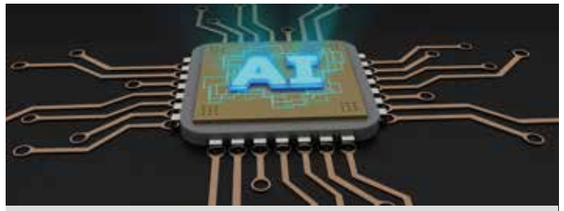
In 2011, Baosi established Vacuum Group, which specialized in design, manufacturing and sales of vacuum products. And in 2018, vacuum division developed into Vacuum Group.
Baosi Vacuum Group took the corporate culture as the core idea, aimed at providing one-stop vacuum solutions for customer, concentrating on making Baosi Vacuum be a world-class well-known vacuum brand.

ABOUT US

INDUSTRY INVOLVED

People-oriented, common values, sincerely valued customers,comprehensive grasp of customer requirements, customers above all else, harmonious development, shared prosperity.


Printing



Semiconductor and Flat Displa


Solar Energy


Wind Energy

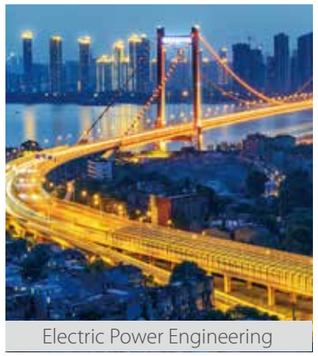

Vacuum Package


Surface Treatment Technique


Analysis and Laboratory


Ceramics and Glasses


Chemistry


Electric Power Engineering


Electronic Technique


Food and BeveRate


Machinofacture


Metallurgy


Petroleum and Gas


Optical Filming


Pharmacy


Plastic and Rubber

OUR SERVICE

CUSTOMER FIRST
EXCELLENT SERVICE
DEVELOP TOGETHER WITH CUSTOMERS

ONE PHONE CALL
EXCELLENT SERVICE **400 1006 555**

SINGLE STAGE ROTARY VANE VACUUM PUMP

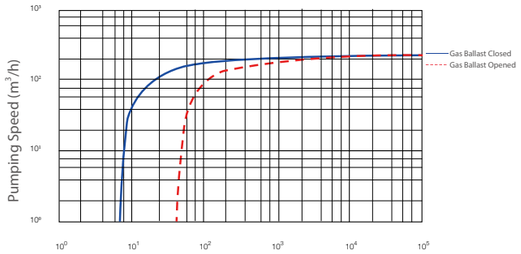
SRV300

SRV630 [750]

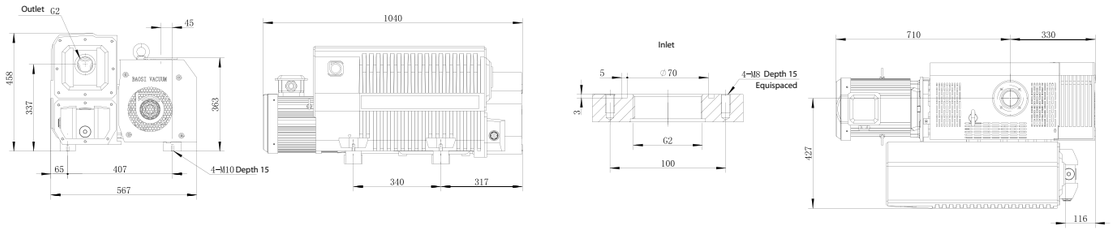
FEATURES

- The use of non-spring rotary vane to achieve low noise, low vibration and long service life.
- Built-in oil check valve is used to avoid the oil return phenomenon.
- Built-in forced fed oil pump is used to ensure the long-term continous operation of the pump at atmospheric pressure.
- The use of air cooling, oil cooling, water cooling and other cooling methods to ensure the good cooling effect, and make the long-term stable runnig of the pump as well as the stable pumping performance.
- Reasonable structure has the advantages of easy assembly and disassembly, as well as the fast and easy maintenance.

PUMP RATE CURVE



INSTALLATION DIAGRAM



SRV300 TECHNICAL PARAMETER

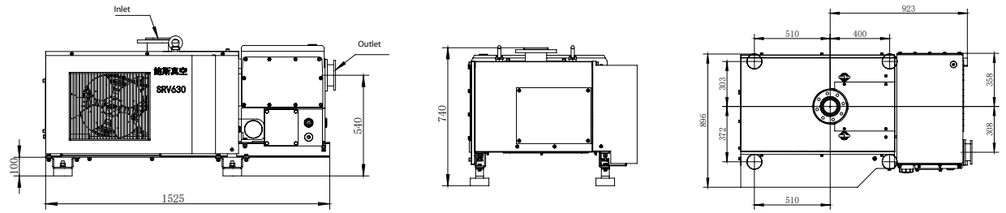
MODEL	SRV300	50Hz	60Hz
Nominal Pumping Speed	m^3/h	280	340
Actual Pumping Speed	m^3/h	240	290
Ultimate Pressure	Pa	⩽ 8	
Ultimate Pressure (With Gas Ballast)	Pa	200	
Motor Power	kW	5.5	
Motor Rated Speed	rpm	1450	1750
Oil Filling (Min / Max)	-	8/10	
Inlet	-	G2	
Outlet	-	G2	
Weight	kg	200	

TECHNICAL PARAMETER

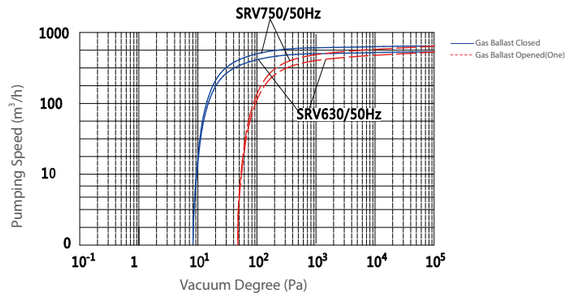
MODEL			SRV630	SRV750
Actual Pumping Speed-Pumping Speed		m^3/h	630	755
Ultimate Pressure	Without Gas Ballast	Pa	⩽ 8	
	One Gas Ballast	Pa	⩽ 70	
	Two Gas Ballasts	Pa	⩽ 200	
Allowable Pressure of Water Vapor-Water Vapor Tolerance	One Gas Ballast	Pa	4000	5000
	Two Gas Ballasts	Pa	6000	7000
Allowable Amount of Water Vapor-Water Vapor Capacity	One Gas Ballast	kg/h	17	24
	Two Gas Ballasts	kg/h	26	34
Noise Level		dB(A)	76	80
Motor Rated Power		kW	15	18.5
Motor Speed		rpm	1460	
Protection Class		-	IP55	
Power Consumption at Ultimate Pressure (without gas ballast)		kW	6.4	
Power Consumption at 100mbar Inlet		kW	12.5	
Pump Rated Speed		rpm	820	1000
Weight	Without Oil	kg	675	740
	Oil	kg	695	760
Oil Filling (Min / Max)		L	27/29	
Inlet		-	DN100ISO-K	
Exhaust		-	See Installation Dimensions	
Exhaust Thermal Protection Switch		-	-	-

• Noise is measured at an angle of 45 ° above the air inlet of the pump at a distance of 1 meter

INSTALLATION DIAGRAM



PUMP RATE CURVE



TWO STAGE ROTARY VANE VACUUM PUMP

DRV3 [5 10 16 24]

BSV30 [40 60 90]

BSV175 [275]

TECHNICAL PARAMETER

MODEL			DRV3	DRV5	DRV10	DRV16	DRV24
Pumping Rate	50Hz	m^3/h (L/min)	3.6 (60)	5.4 (90)	9.9 (165)	14.4 (240)	20 (336)
	60Hz	m^3/h (L/min)	4.3 (72)	6.5 (108)	12 (200)	17.4 (290)	24 (403)
Ultimate Pressure	Gas Ballast Closed	Pa			$5X10^{-1}$		
	Gas Ballast Opened	Pa			5		
Motor Power	380V (Triphase)	kW		0.4 (4 Poles)		0.55 (4 Poles)	0.75(4 Poles)
	220V (Single Phase)	kW					
Oil Filling		L	0.7	0.7	1.1	1.2	0.75~1.5
Inlet		KF			KF25		
Outlet		KF			KF25		
Weight		kg	22.5	22.5	25	27	32

MODEL			BSV30	BSV40	BSV60	BSV90
Pumping Rate	50Hz	m^3/h (L/min)	30 (500)	40 (667)	60 (1000)	90 (1500)
	60Hz	m^3/h (L/min)	36 (600)	48 (800)	72 (1200)	108 (1800)
Ultimate Pressure	Gas Ballast Closed	Pa				
	Gas Ballast Opened	Pa		2.0		
Motor Power (4P)		kW	1.1	1.5	2.2	3.7
Voltage	Triphase	V		380,400		
Oil Filling		L	1.2~2.8		2.5~4.2	
Inlet		KF		40		
Outlet		KF		40		
Ambient Temp.		℃		5~40		
Weight		kg	63	65	87	101

MODEL			BSV175	BSV275
Pumping Rate	50Hz	m^3/h (L/min)	160 (2656)	255 (4233)
	60Hz	m^3/h (L/min)	196 (3254)	306 (5080)
Motor Rotational Speed	50Hz	r/min	1440	1440
	60Hz	r/min	1720	1720
Motor Power	Triphase /4 Poles	kW	5.5	7.5
Ultimate Pressure	Gas Ballast Closed	Pa	$5X10^{-1}$	$5X10^{-1}$
	Gas Ballast Opened	Pa	2	2
Allowed Maximum Outlet Pressure	Gauge Pressure	MPa	0.05	0.05
Maximum Capacity of Water Vapor	-	kg/h	2.4	2.5
Inlet	JIS	DN	VG80	VG80
Outlet	JIS	DN	VG50	VG50
Oil Filling	Max	L	25	28
	Min	L	20	23
Cooling Water Requirement	Water Temp 20℃	L/h	80	120
Weight	With Motor	kg	230	255

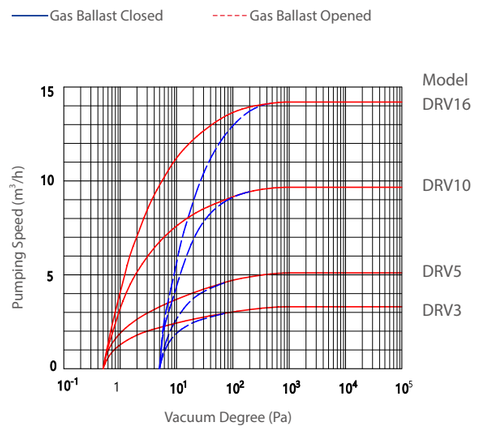
• The value of 'ultimate pressure' in the sheet is measured by Pirani gauge when the Baosi special pump oil is used, and the value should be $5X10^{-2}$, if the Mcleod gauge be used.
• Therefore, the Baosi special pump oil is recommended to guarantee the pump performance.

BAOSI VACUUM

PUMP RATE CURVE

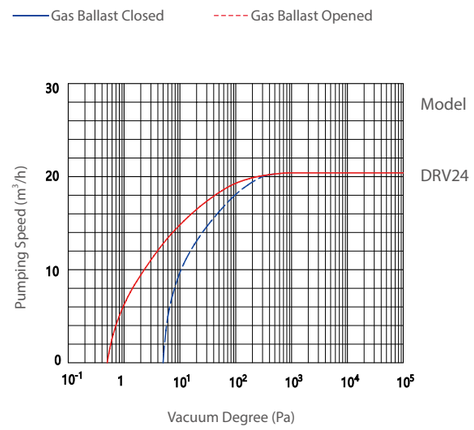
DRV3[5 10 16]

Power supply: 380V 50HZ
Vacuum gauge: Pirani Gauge
Vacuum pump oil: Special oil BSO-46



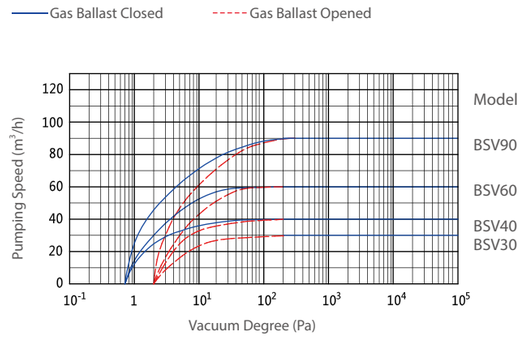
DRV24

Power supply: 380V 50HZ
Vacuum gauge: Pirani Gauge
Vacuum pump oil: Special oil BSO-68



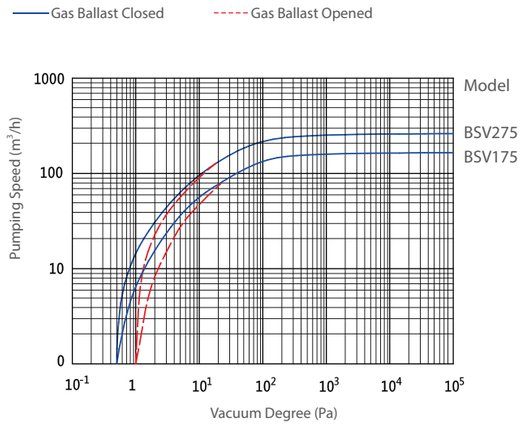
BSV30[40 60 90]

Power supply: 380V 50HZ
Vacuum gauge: Pirani Gauge
Vacuum pump oil: Special oil BSO-68



BSV175[275]

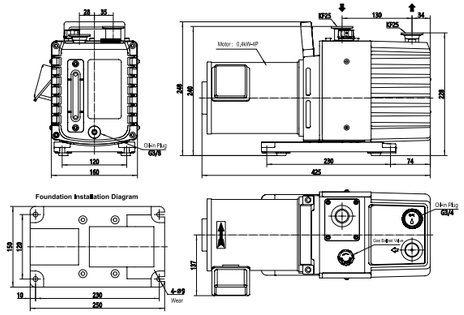
Power supply: 380V 50HZ
Vacuum gauge: Pirani Gauge
Vacuum pump oil: Special oil BSO-68



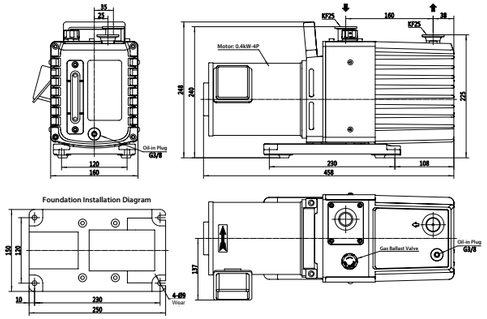
BAOSI VACUUM

INSTALLATION DIAGRAM

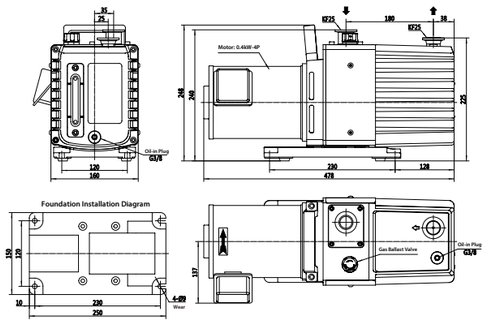
DRV3[5]



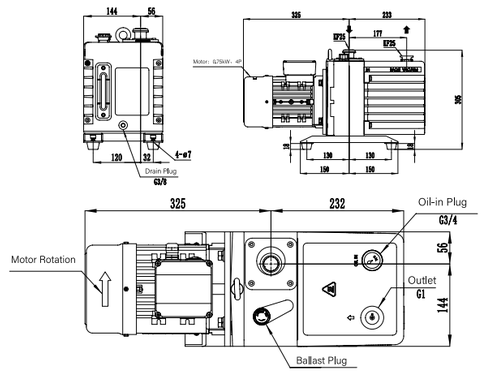
DRV10



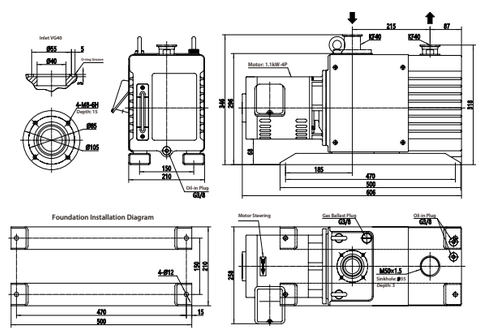
DRV16



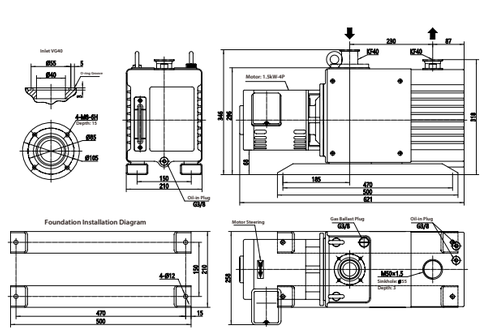
DRV24



BSV30



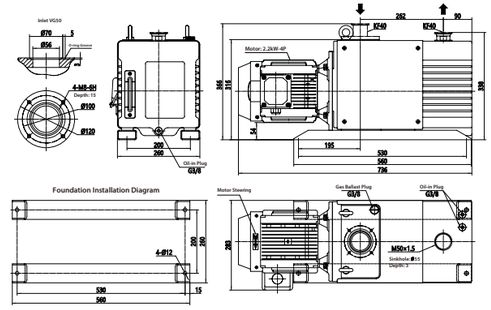
BSV40



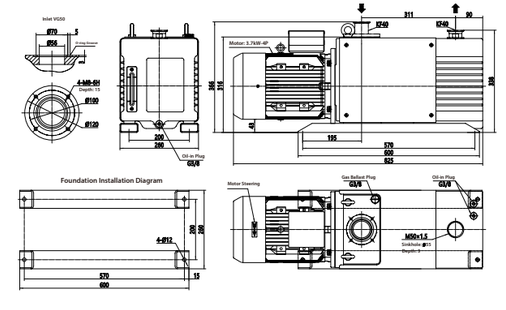
OIL ROTARY VANE VACUUM PUMP

INSTALLATION DIAGRAM

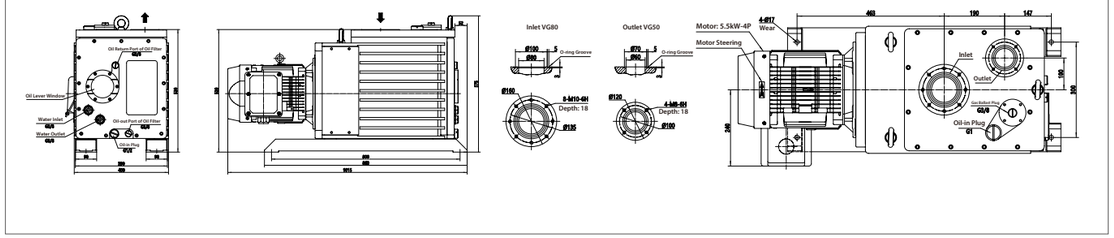
BSV60



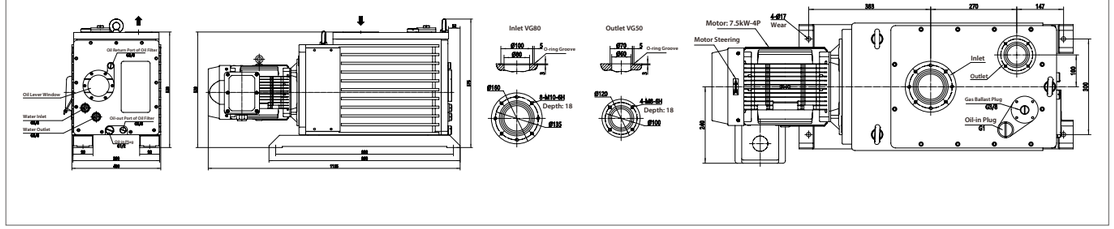
BSV90



BSV175



BSV275



ROOTS VACUUM PUMP

BSJ30L [70L 150L 300L 600L]

BSJ600LC [1200LC]

FEATURES

- The use of oil-free intermediate seal, multiple sealed way to ensure the high clean vacuum environment in the rotor chamber.
- Advanced processing to ensure the good geometrical symmetry of the rotors, as well as low noise and long service life.
- Special shaft seal is used to achieve the long stable running without oil leakage.
- Compact structure, light weight, and small volume.

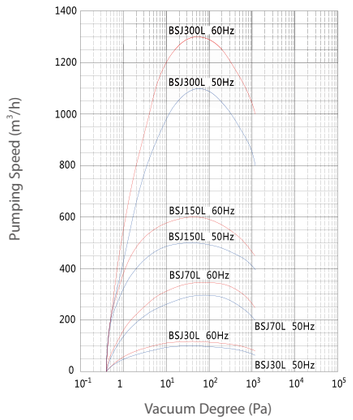
DIRECT DRIVE TECHNICAL PARAMETER

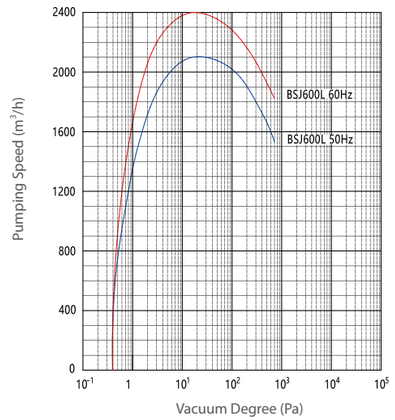
MODEL			BSJ30L	BSJ70L	BSJ150L	BSJ300L	BSJ600L
Pumping Rate	50Hz	m^3/h (L/min)	100 (1667)	280 (4670)	500 (8330)	1000 (16667)	2000 (33330)
	60Hz	m^3/h (L/min)	120 (2000)	330 (5500)	600 (10000)	1200 (20000)	2400 (40000)
Max Intake Pressure (continuous operation)	50Hz	Pa	$1.2X10^3$		$1.3X10^3$		$8.0X10^2$
	60Hz	Pa	$9.3X10^2$		$1.1X10^3$		$6.7X10^2$
Max allowed differential pessure	50Hz	Pa	$4.0X10^3$		$7.3X10^3$		$5.6X10^3$
	60Hz	Pa	$3.3X10^3$		$6.0X10^3$		$4.7X10^3$
Ultimate Pressure		Pa			$4.0X10^{-2}$		
Motor Power (2P)	Three Phase	kW	0.4	0.75	2.2	3.7	7.5
Voltage		V			380, 400		
Oil Filling		L	0.4	0.8	1.6	2.0	4.0
Flow Rate	Flow	L/min	-	2	2	3	3
	Differential Pressure	MPa	-		0.1		
	Water Temp.	℃	-		5~30		
Inlet		-	VG50	VG80	VG80	VG100	VG200
Outlet		-	VF50	VF80	VF80	VF80	VF200
Ambient Temp.		℃			5~40		
Weight		kg	30	51	80	115	227

- The value of 'ultimate pressure' in the sheet is measured by Pirani gauge when the Baosi special pump oil is used, and the value should be $4X10^{-3}$, if the Mcleod gauge is used.

DIRECT DRIVE PUMP RATE CURVE

Vacuum gauge: Pirani vacuum gauge
Vacuum pump oil: BAOSI vacuum special oil BSO-46





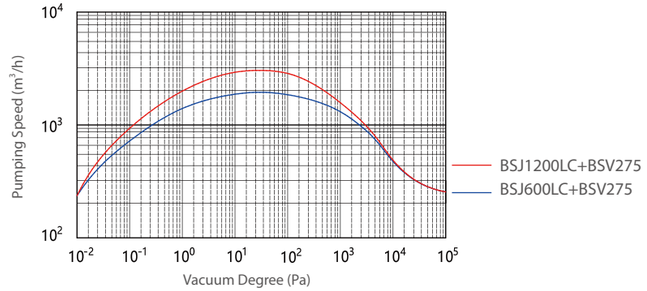
HYDRAULIC COUPLING TECHNICAL PARAMETER

MODEL			BSJ600LC	BSJ1200LC
Pumping Rate	50Hz	m^3/h	2590	4140
	60Hz	m^3/h	3110	4985
Max Intake Pressure (continuous operation)	50Hz	Pa	1.0×10^5	
	60Hz	Pa	1.0×10^5	
Max allowed differential pessure	50Hz	Pa	8.0×10^3	6.0×10^3
	60Hz	Pa	6.7×10^3	5.0×10^3
Ultimate Pressure		Pa	0.4	
Motor Power (2P)	Three Phase	kW	7.5	11
Lubricating Oil Specification		-	BSO-46	
Gear Cover		L	3.5	
Hydraulic Drive		L	6.5	
Shaft Seal Reservoir		L	1.5	
Flow Rate	Flow	L/min	6	
	Differential Pressure	MPa	0.2~0.6	
	Water Temp.	℃	5~35	
Weight		kg	350	420
Inlet		-	ISO160	ISO250
Outlet		-	ISO100	

- Depending on the performance of the rough pump, the data in the table is the data used in combination with the standard rough pump.
- The ultimate pressure is a value measured with a Pirani vacuum gauge, and is 4×10^{-2} Pa as measured by a Mcleod vacuum gauge.
- The cooling water inlet temperature must be 5 to 35 °C. When the cooling water temperature is too low, the pump should be used in an environment where condensation does not occur.

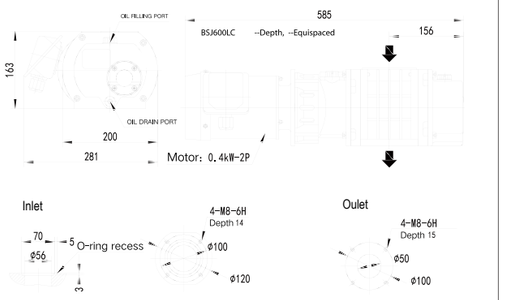
HYDRAULIC COUPLING PUMP RATE CURVE

Power: 380V-50Hz
Vacuum gauge: Pirani vacuum gauge
Vacuum pump oil: special oil for BAOSI vacuum pump

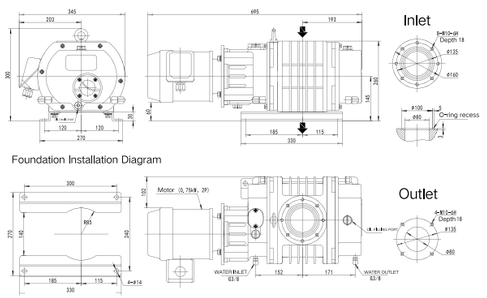


INSTALLATION DIAGRAM

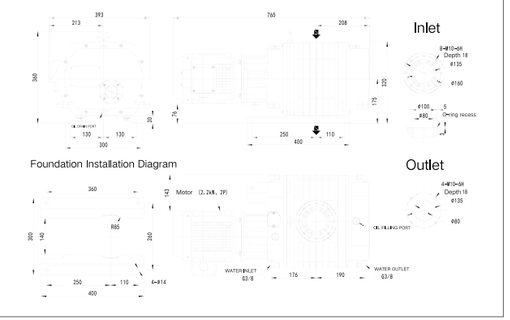
BSJ30L



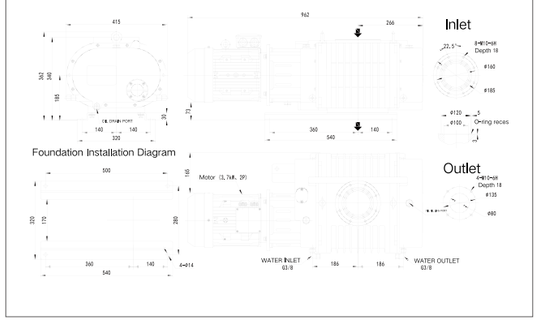
BSJ70L



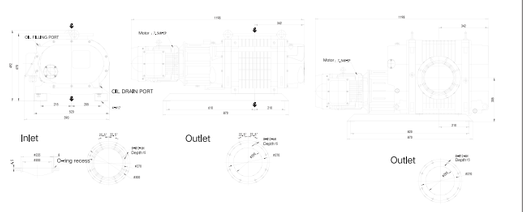
BSJ50L



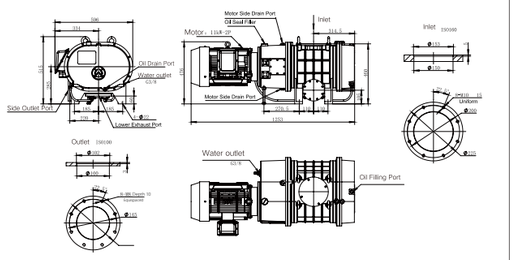
BSJ300L



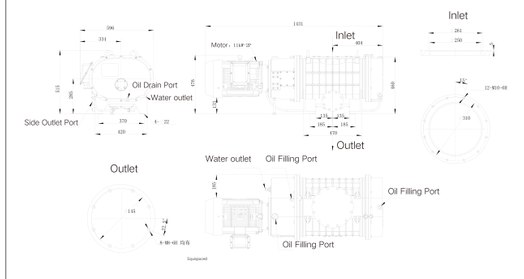
BSJ600L



BSJ600LC



BSJ1200LC



BAOSI VACUUM

VACUUM PUMP SYSTEM

APPLICATIONS

- Evaporation coating, sputtering coating, ion planting, optical coating etc.
- Single crystal furnace, polycrystalline furnace,vacuum heat treatment furnace, sintering furnace, annealing furnace, hardening furnace etc.
- Vacuum drying, freeze drying, leaking detection equipment and system, gas recovery system, LC injection etc.
- Refrigerator, air conditioners, central air-conditioning, LED, Back light automatic pumping line, exhaust equipment etc.

TECHNICAL PARAMETER OF ROOTS PUMP SYSTEM

Parameter \ MODEL			JZ70A JZ70B JZ70C JZ70D	JZ150C JZ150D	JZ300H
Ultimate Pressure	Pa			$4X10^{-2}$	
System	Roots Pump		BSJ70L	BSJ150L	BSJ300L
	Oil Rotary		BSV30	BSV60	BSV275
			BSV40	BSV60	BSV275
			BSV60	BSV90	BSV275
			BSV90	BSV90	BSV275
Motor (kW)	Roots pump (2P)		0.75	2.2	3.7
	Oil Rotary Pump(4P)		1.1	2.2	7.5
			1.5	2.2	7.5
			2.2	3.7	7.5
			3.7	3.7	7.5
Oil Filling (L)	Standard oil of Roots pump		0.8	1.6	2
				Standard oil of Roots Pump BSO46	
	Standard oil of Oil Rotany pump		1.2~2.8	2.5~4.2	23~28
			2.5~4.2	2.5~4.2	23~28
				Standard oil of Roots Pump BSO68	
Cooling Water	Cooling Way	Roots Pump	-	Water Cooling	Water Cooling
		Oil Rotary	-	-	Water Cooling
	Water Pressure In-Out Water Differential Pressure			⩽ 0.3 MPa(Gauge Pressure)/0.1MPa	
	Water Temp.(℃)			5~30	
	Water Yield (L/min)		2	4	6
Air Intake (OD)				VG80	VG100
Air Outlet (OD)				KF40	VG50
Options			1 Electric Cabinet; 2 Vacuum Gauge; 3 Suction Port Flange; 4 Filter; 5 Switch Of Cooling Water		

BAOSI VACUUM

SCREW DRY VACUUM PUMP

GSD Series

GSC Series

Dry screw vacuum pump is new kind of oil-free vacuum pump appeared in recent years. With the features of compact-size, high pumping speed, high vacuum rate, non-friction, long working life and pumping capacity of corrosive, toxic, condensed, dust gas, it becomes a perfect option for various of working conditions. The main components of this pump are a couple of coarse pitch screw with opposite rotation and a pair of high-precision and hardened gears. Based on two screw have absolutely opposite helical sensed and driven by synchronous gear, there is certain gap between the screw and chamber and between the two screws.

Our dry screw vacuum pump use the unique screw technology and leading driving technology to achieve the features of leading temperature controlling, advanced temperature control ,minimal mintenance requirements , better performance to lowest cost of ownership.

APPLICATIONS

Metallurgy

Vacuum brazing, Electron beam welding, Nitro carburizing, Low pressure nitriding, Low pressure carburizing, Chemical vapor phase impregnation, Sintering, Metal injection molding, Precision investment casting, Electroslag remelting, Vacuum induction melting, Vacuum arc refining, Steel liquid degassing etc.

Coating

Roll-to-roll coating, Hard coating (CVD/DLC), Surface activation, Plasma spraying, Glass coating etc.

Drying

Freeze drying, Casing filling, Transformer drying, Pipeline drying, Capacitor drying, Lithium battery drying etc.

Plasma

Plasma welding, Ion nitriding, Plasma etching, Plasma cleaning etc.

Vacuum Chamber Exhausting

Space environment simulation, Gas recovery/ circulation, Vacuum chamber evacuation etc.

Photovoltaic

Single crystal silicon pulling, PV laminating, LED manufacturing etc.

Other

Laminator, Medical instrument etc.

FEATURES

- Efficient rotor profile design with the high ultimate pressure.
- Oil-free, clean vacuum, combine with roots pump for system.
- Good geometrical symmetry, low noise, long working life.
- Remove condensable steam, dust, toxic and other gases, and will not be trapped in the pump chamber.
- Double-ended bearing support design for reliable rotor support, extremely low vibration and superior starting reliability, especially for special demanding process.
- Combined with lip-style seal and labyrinth oil-repellent structure to achieve strong sealing performance and long service life, with nitrogen purging to prevent gear box from the pollution of process medium to achieve oil-free vacuum environment.
- High-efficiency permanent magnet synchronous motor with frequency converter to maximize torque output for harsh processing demand; water-cooled integral sealed motor design to eliminate oil leakage to improve operational reliability, extend service life and reduce maintenance costs.
- Intelligent control system design to realize the one-button start and stop by using intelligent program. The pump chamber can be automatically cleaned during shut down, and the remote control and monitoring functions can be realized through the external control I/O interface and RS485 interface (Modbus protocol).
- Compact-size, few parts, few spares, stable running, light weight, small size, easy installation.

BAOSI VACUUM

APPLICATION SOLUTION

Whether you need a single vacuum pump, roots vacuum pump system or complete vacuum system, our range of pump types provides the best performance solution for your wide range of applications.
The following table are the typical application of dry screw vacuum pump. For other application, please contact us for advice.

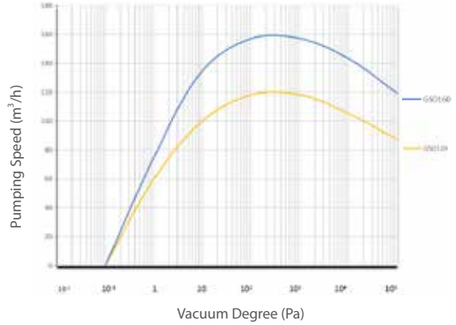
	Purging mode		Accessories	
Application	Low loading Sealed purging	Medium loading Sealed purging+ ilution purging+ inlet purging when starting and stopping	High loading Medium loading +High flow purging or flux rinse when stopping	Inlet filter Metal net	Silencer Washable
Annealing	★				
CVI CVD		★	★	★	★
Electron Beam Welding		★		★	
Gas Quenching	★				
LPC Low Pressure Carburizing		★	★	★	★
LPN Low Pressure Carburizing	★				
Sintering +Dewaxing		★	★	★	
Oil Quenching		★		★	
PIC Precision Investment Casting		★	★		
Ion Carburizing	★				
Tempering	★				
Vacuum Brazing		★	★	★	
VAR		★	★	★	
VIM		★	★	★	

Note: The mark " ★ " is the applicable situation

GSD SERIES PUMP

MODEL			GSD120B	GSD160B	GSD160D
Speed (without purging)		m^3/h	120	160	160
Ultimate pressure (without purging)		Pa	⩽ 0.5	⩽ 0.5	⩽ 0.5
Motor	Motor power	kW	3.7	5.5	5.5
	Voltage (3 phase)	V	380/ 400		
Interface	Inlet	–	KF40		
	Outlet	–	KF40		
Cooling water	Pressure	MPa	0.1~0.4		
	Flow	L/min	⩾ 4		
	Temprature	℃	5~30		
	Interface	–	G3/8		
N_2 Purging	Pressure	MPa	0.2~0.6		
	Flow	L/min	12~50		
	Interface	–	G1/4		
Max Allowed Outlet Pressure		MPa	0.14		
Niose (with silencer and check valve)		dB	⩽ 70		
Water Temp.		℃	5~40 ℃ / Below 90% RH		
Weight		kg	~325	~340	~350

PUMPING RATE CURVE



INSTALLATION DIAGRAM

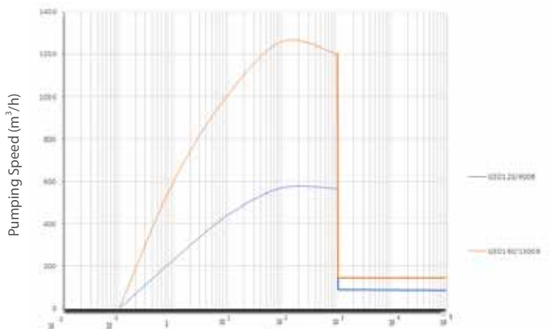
MODEL	A	B	C	D	E	F	G	H	I	M	INLET	OUTLET
GSD120B	1100	505	430	1350	450	100	570	215	820	300	KF40	KF40
GSD160B	1100	505	430	1350	450	100	570	215	820	300	KF40	KF40
GSD160D	1100	570	430	1360	450	100	725	216	820	300	KF40	KF40

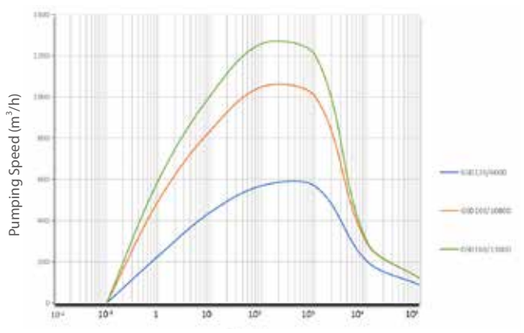
BAOSI VACUUM

GSD SERIES PUMP SYSTEM

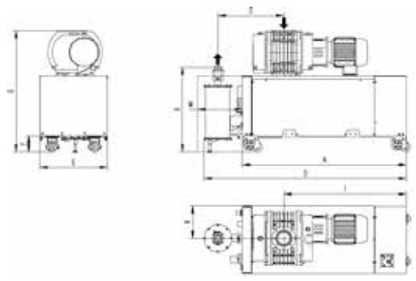
MODEL			GSD120/600B	GSD160/1300B	GSD120/600D	GSD160/1080D	GSD160/1300D
Speed (without purging)		m^3/h	600	1300	600	1080	1300
Ultimate Pressure (without purging)		Pa	⩽ 0.1	⩽ 0.1	⩽ 0.1	⩽ 0.1	⩽ 0.1
Motor	Motor power	kW	2.2+3.7	3.7+5.5	2.2+3.7	3.7+5.5	3.7+5.5
	Voltage (3 phase)	V			380/ 400		
Interface	Inlet	-	VG80	VG100	VG80	VG100	VG100
	Outlet	-			KF40		
Cooling Water	Pressure	MPa			0.1~0.4		
	Flow	L/min			⩾ 4		
	Temprature	℃			5~30		
	Interface	-			G3/8		
N_2 Purging	Pressure	MPa			0.2~0.6		
	Flow	L/min			12~50		
	Interface	-			G1/4		
Max Allowed Outlet Pressure		MPa			0.14		
Niose (with silencer and check valve)		dB	⩽ 70	⩽ 72	⩽ 68	⩽ 70	⩽ 70
Water Temp.		℃			5~40 ℃ / Below 90% RH		
Weight		kg	~425	~475	~455	~490	~495

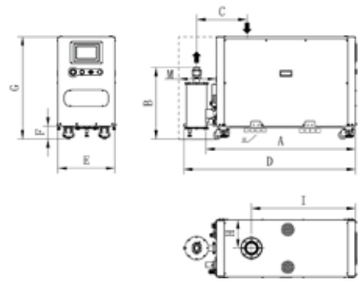
PUMPING RATE CURVE





GSD INSTALLATION DIAGRAM





MODEL	A	B	C	D	E	F	G	H	I	M	INLET	OUTLET
GSD120/600B	1100	570	430	1350	450	100	825	216	820	300	VG80	KF40
GSD160/1300B	1100	570	430	1350	450	100	825	216	820	300	VG100	KF40
GSD120/600D	1100	570	430	1350	450	100	825	216	820	300	VG80	KF40
GSD160/1080D	1100	570	430	1350	450	100	825	216	820	300	VG100	KF40
GSD160/1300D	1100	570	430	1350	450	100	825	216	820	300	VG100	KF40

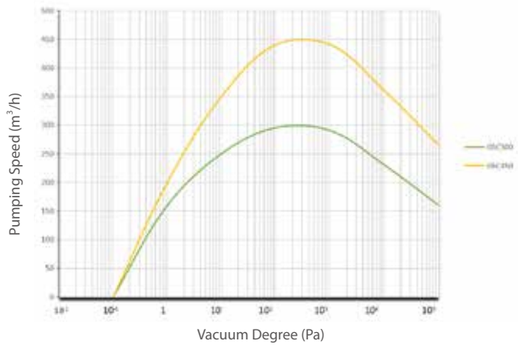
BAOSI VACUUM

GSC SERIES PUMP

MODEL			GSC300B	GSC450B
Speed (without purging)		m^3/h	300	450
Ultimate Pressure (without purging)		Pa	⩽ 0.5	⩽ 0.5
Motor	Motor power	kW	5.5	11
	Voltage (3 phases)	V	380/ 400	
Interface	Inlet	-	KF50	ISO100
	Outlet	-	KF40	KF50
Cooling Water	Pressure	MPa	0.1~0.4	0.1~0.3
	Flow	L/min	⩾ 4	⩾ 6
	Temprature	℃	5~30	
	Interface	-	G3/8	
N_2 Purging	Pressure	MPa	0.2~0.6	
	Flow	L/min	12~50	23~90
	Interface	-	G1/4	
Max Allowed Outlet Pressure		MPa	0.14	
Niose (with silencer and check valve)		dB	⩽ 70	⩽ 73
Water Temp.		℃	5~40 ℃ / Below 90% RH	
Weight		kg	~355	~530

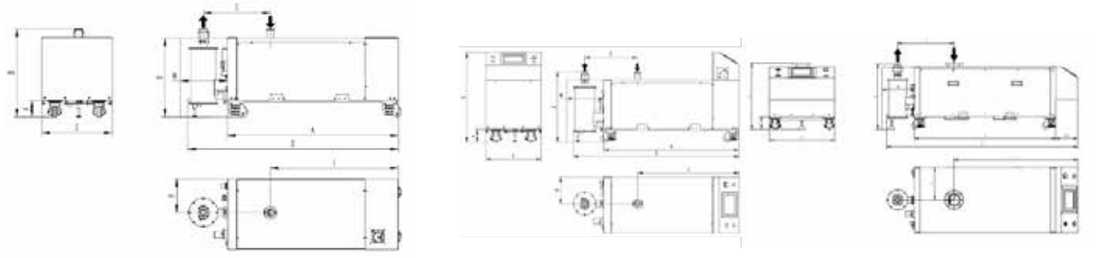
MODEL			GSC300D	GSC450D
Speed (without purging)		m^3/h	300	450
Ultimate Pressure (without purging)		Pa	⩽ 0.5	⩽ 0.5
Motor	Motor power	kW	5.5	11
	Voltage (3 phase)	V	380/ 400	
Interface	Inlet	-	KF50	ISO100
	Outlet	-	KF40	KF50
	Interface	-	G3/8	
Cooling Water	Pressure	MPa	0.1~0.4	0.1~0.3
	Flow	L/min	⩾ 4	⩾ 6
	Temprature	℃	5~30	
	Interface	-	G1/4	
N_2 Purging	Pressure	MPa	0.2~0.6	
	Flow	L/min	12~50	23~90
Max Allowed Outlet Pressure		MPa	0.14	
Niose (with silencer and check valve)		dB	⩽ 70	⩽ 73
Water Temp.		℃	5~40 ℃ / Below 90% RH	
Weight		kg	~365	~540

PUMPING RATE CURVE



BAOSI VACUUM

GSD INSTALLATION DIAGRAM

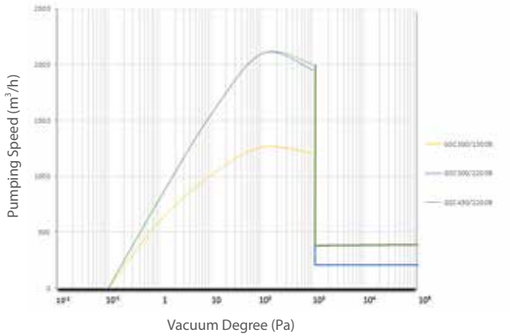


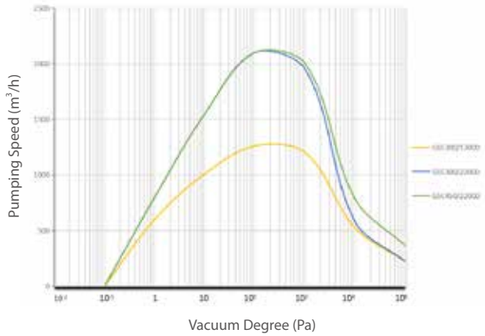
MODEL	A	B	C	D	E	F	G	H	I	M	INLET	OUTLET
GSC300B	1100	570	430	1350	450	100	570	216	820	300	KF50	KF40
GSC450B	1300	600	519	1558	600	11	605	300	940	300	ISO100	KF50
GSC300D	1130	560	380	1360	450	90	650	220	820	300	KF50	KF40
GSC450D	1300	600	519	1558	600	115	605	300	940	300	ISO100	KF50

GSC SERIES PUMP SYSTEM

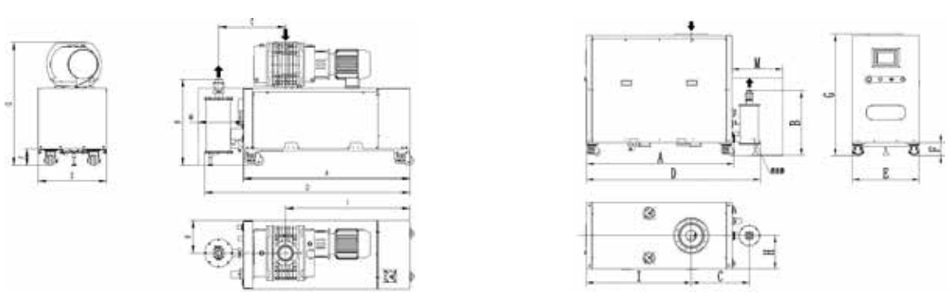
MODEL			GSC300/1300B	GSC450/2200B	GSC300/1300D	GSC300/2200D	GSC450/2200D
Speed (without purging)		m³/h	1300	2200	1300	2200	2200
Ultimate Pressure (without purging)		Pa	⩽ 0.1	⩽ 0.1	⩽ 0.1	⩽ 0.1	⩽ 0.1
Motor	Motor power	kW	3.7+5.5	7.5+11	3.7+5.5	7.5+5.5	7.5+11
	Voltage (3 phase)	V			380/ 400		
Interface	Inlet	-	VG100	VG200	VG100	VG200	VG200
	Outlet	-	KF40	KF50	KF40	KF40	KF50
Cooling Water	Pressure	MPa	0.1~0.4	0.1~0.3	0.1~0.4	0.1~0.4	0.1~0.3
	Flow	L/min	⩾ 4	⩾ 6	⩾ 4	⩾ 4	⩾ 6
	Temprature	℃			5~30		
	Interface	-			G3/8		
N_2 Purging	Pressure	MPa			0.2~0.6		
	Flow	L/min	12~50	23-90	12~50	12~50	23-90
	Interface	-			G1/4		
Max Allowed Outlet Pressure		MPa			0.14		
Niose (with silencer and check valve)		dB	⩽ 72	⩽ 75	⩽ 70	⩽ 72	⩽ 75
Water Temp.		℃			5~40 ℃ / Below 90% RH		
Weight		kg	~490	~820	~515	~650	~850

PUMPING RATE CURVE





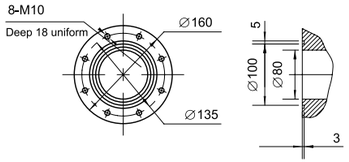
GSC INSTALLATION DIAGRAM



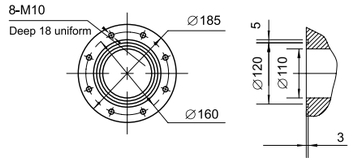
MODEL	A	B	C	D	E	F	G	H	I	M	INLET	OUTLET
GSC300/1300B	1100	570	430	1350	450	100	825	216	820	300	VG100	KF40
GSC450/2200B	1340	580	520	1580	600	115	1100	300	940	450	VG200	KF50
GSC300/1300D	1100	570	430	1350	450	100	825	216	820	300	VG100	KF40
GSC300/2200D	1340	580	520	1580	600	115	1100	300	940	450	VG200	KF50
GSC450/2200D	1340	580	520	1580	600	115	1100	300	940	450	VG200	KF50

FLANGE SIZE

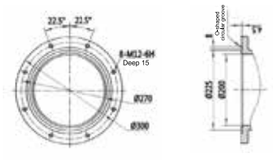
Single pump inlet flange is KF50 or KF40. Vacuum system inlet flange is VG80/ VG100 or VG200 as following size.



VG80



VG100



VG200

ACCESSORIES

The available with a wide range of accessories for a wide range of applications. The cost is saved on the premise of satisfying the user's requirements. All accessories can be fully integrated with the dry screw vacuum pump to create an efficient and safe system.

Inlet Adapter Flange

Due to the different connections of each device, we offer a range of inlet adapter flanges for vacuum pump. These flanges allow the installation of air intake filter and functional interface to ensure easy connection to the customer's equipment.

Silencer

In order to reduce the noise of the exhausting,it's absolutely necessary to equip the silencer of the pump. We provide customers with standard silencer as well as a variety of silencer customization service according to the working conditions.

Intake Filter

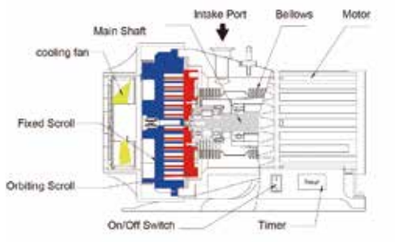
Screw vacuum pump has excellent dust handling capacity in many applications. However, the screw vacuum pump cannot continuously extract solid matter, so in some applications, installing the air intake filter can greatly extend the maintenance interval of the vacuum pump.

Check Valve

We choose the exhaust check valve according to the pressure of customer's working condition to minimize the noise of the vacuum pump.

SCROLL VACUUM PUMP

GSP3 [10]



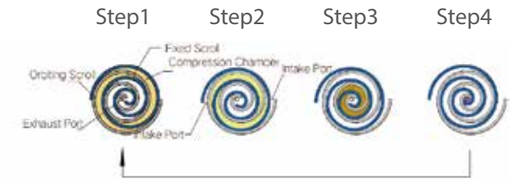
Scroll pump is a new kind of oil-free mechanical pump with features of simple construction, good sealing, high vacuum ect. As a high-technology product, it has highly technical requirement in desigh and manufacture. With benefits of low consumption, long working life, high reliability, and low noise, It has incomparable advantages in the application of clean process and has been popularly used in the market. GVD, GSP series scroll dry pumps are scroll dry pumps with excellent performance and obvious price competitiveness, which are introduced by Baosi Vacuum for the characteristics of downstream applications at home and abroad.

APPLICATIONS

Clean vacuum, Backing turbomolecular pumps, Library, Analysis equipment, Leak detection, Beam line, Scientific researching, Medical equipment, Distillation/extraction/filtration, Laser, Semiconductor（LED/LCD), Photovoltaic, Coating（PVD/CVD), Battery, Glove box, Beam welding/laser welding, Space simulation.

WORKING PRINCIPLE

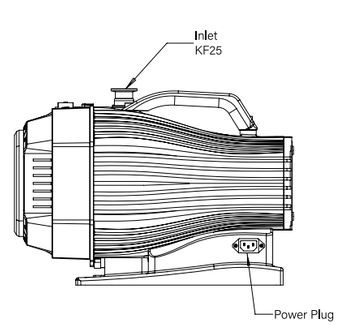
- Step1. Gas enters scroll set
- Step2. Gas is displaced and...
- Step3. ...compressed toward center hub
- Step4. Gas exhausted at center hub

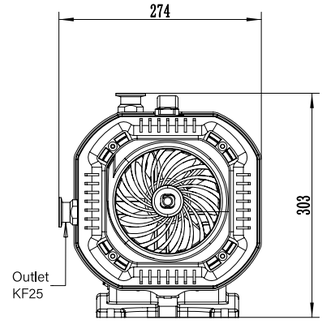


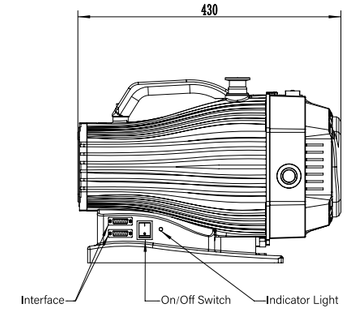
TECHNICAL PARAMENT

MODEL		GSP3	GSP10
Nominal Rotation Speed	rpm	1800	1800
Displacement	L/s	3	10.5
Ultimate Vacuum	mbar	0.008	0.01
Motor Power	W	400	1100
Voltage Input	V	1- phase 100-240	1- phase100-240
Dimensions	mm	430×255×290 (L×W×H)	574×335×368 (L×W×H)
Noise Level	dB(A)	54	56
Inlet Flange	-	NW 25	NW 40
Exhaust Flange	-	NW 25	NW 25
Max Water Vapour Pumping Rate	gh^{-1}	100	200
Leak Tightness	mbar·l/s	$< 1\times10^{-6}$	$< 1\times10^{-6}$
Weight	kg	28	50
Cooling System	-	Air-cooled	Air-cooled
Operating Temperature	℃	10 to 40	10 to 40

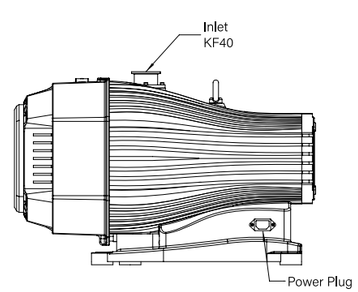
GSP3 INSTALLATION DIAGRAM

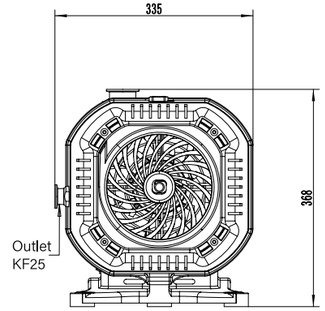


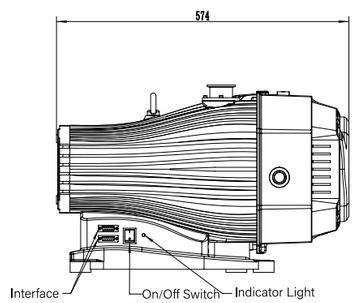




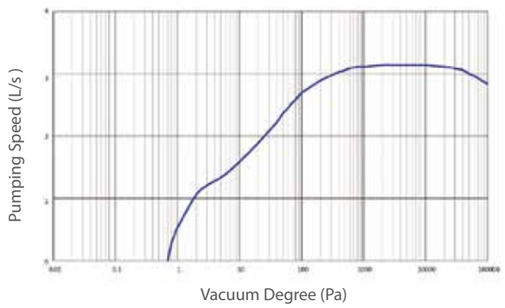
GSP10 INSTALLATION DIAGRAM



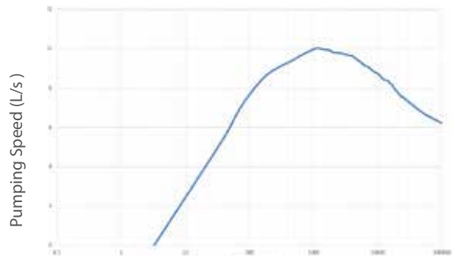




PUMPING RATE CURVE



GSP3



GSP10

HI-VACUUM ANGLE VALVES

GD

GDQ

GDC

This valve is suitable for working medium with air and non-corrosive gas. It is used to cut or turn on the vacuum line and is one of the important components of the vacuum system. The hand wheel is turned by hand (manual) or compressed air (pneumatic) as the driving force and the mechanism is connected with valve plate to lift and lower, and the valve opening and closing action is completed.

FEATURES

- Modular two-position three-way solenoid valve to realize quick combination by simple operation to meet different needs of customers.
- Dust-proof design for application with a small amount of dust.
- Dynamic seal with welding corrugated pipe in AM350 material for more than million times service life.
- The open/close position is mechanical micro switch, which is sensitive to reaction, reliable in output and strong in anti-interference.
- With mechanical position indication.
- Easy to replace and repair.
- Anodized surface of valve body.

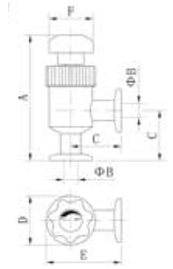
APPLICATION

Widely applied in semiconductor, photovoltaic, new energy, pharmaceutical, scientific reserrch, laboratory, chemical, light industry, metallurgy, petroleum, machinery, electronics and other industries, as well as electric vacuum device manufacturing, light bulbs, vacuum flask manufacturing, vacuum welding, vacuum casting, instrumentation, printing and packaging machinery, etc.

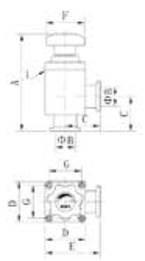
GD SERIES HV MANUAL VALVE PARAMETER

MODEL			GD-J16B	GD-J25B	GD-J40B	GD-J50B
DN		mm	16	25	40	50
Pressure Range		Pa	1×10^{-6} ~ 5×10^{5}			
Pressure Differential	Opening Direction	Pa	1.2×10^{5}			
	Closure Direction	Pa	5×10^{5}			
Opening Pressure Differential		Pa	⩽ 1.2×10^{5} Any Orientation			
Leak Rate		Pa·L/s	⩽ 1.3×10^{-7}			
Switching Cycles		—	1 Million Times			
Conductance		L/s	4.5	14	45	80
Temperature		℃	⩽ 120			
Opening/Closure Time		s	Manual Operation Time			
Position Indication		—	Mechanical Indicator			
Installation Position		—	Any			
Ambient Temperature		℃	5~40			

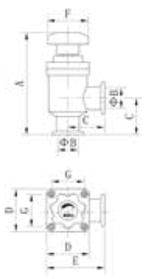
APPREARANCE AND FIXING DIMENSION DRAWING



DN6-10



DN16-50



DN16-50

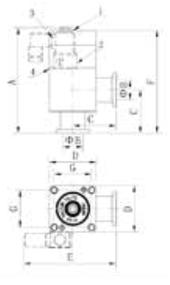
MODEL	DN	Dimension Table (mm)						
		A	B	C	D	E	F	G
GD-J6~10(B)	6~10	90.4	6~10	35	36	53	32	—
GD-J16(B)	16	110	16	40	46	63	40	35
GD-J25(B)	25	120	25	50	54	77	50	43
GD-J40(B)	40	151	40	65	74	102	60	61
GD-J50(B)	50	170	50	70	78	109	60	65

GDQ SERIES HV PNEUMATIC VALVE PARAMETER

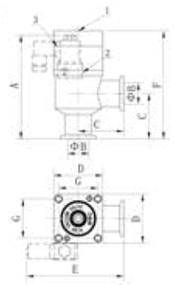
MODEL			GDQ-J16(B)	GDQ-J25(B)	GDQ-J40(B)	GDQ-J50(B)
DN		mm	16	25	40	50
Pressure Range		Pa	1×10^{-5} ~ 5×10^{5} (1×10^{-6} ~ 5×10^{5})			
Pressure Differential	Opening Direction	Pa	1.2×10^{5}			
	Closure Direction	Pa	5×10^{5}			
Opening Pressure Differential		Pa	⩽ 1.2×10^{5} Any Orientation			
Leak Rate		Pa·L/s	⩽ 1.3×10^{-7}			
Switching Cycles		—	1 Million Times			
Conductance		L/s	4.5	14	45	80
Temperature		℃	⩽ 120			
Power		—	A/C 220V 50Hz or D/C 24V,3W,			
Opening/Closure Time		s	⩽ 0.7			
Compressed Air		MPa	0.4~0.7			
Position Indication		—	Passive Switch Signal + Mechanical Indicator			
Installation Position		—	Any			
Ambient Temperature		℃	5~40			

APPREARANCE AND FIXING DIMENSION DRAWING

- Mechanical Indicator
- Module Components (Standard)
- Compressed Air Connection
- Leak Detection Hole



DN16-50



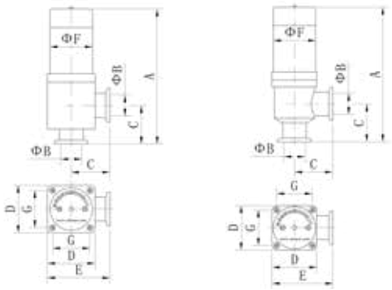
DN16-50

MODEL	DN	Dimension Table (mm)						
		A	B	C	D	E	F	G
GD-J6~10(B)	6~10	90.4	6~10	35	36	53	32	—
GD-J16(B)	16	110	16	40	46	63	40	35
GD-J25(B)	25	120	25	50	54	77	50	43
GD-J40(B)	40	151	40	65	74	102	60	61
GD-J50(B)	50	170	50	70	78	109	60	65

GDC SERIES HV ELCTROMAGNETIC VALVE PARAMETER

MODEL			GDC-J16(B)	GDC-J25(B)	GDC-J40(B)	GDC-J50(B)
DN		mm	16	25	40	50
Pressure Range		Pa	1×10^{-5}~1×10^{5} (1×10^{-6}~1×10^{5})			
Pressure Differential	Opening Direction	Pa	$\leqslant 1\times10^{5}$			
	Closure Direction	Pa	$\leqslant 5\times10^{5}$			
Differential Opening Pressure		Pa	$\leqslant 1\times10^{5}$ Any Orientation			
Leak Rate		Pa·L/s	$\leqslant 1.3\times10^{-7}$			
Number Of First Maintenance Cycles		—	200 000			
Valve Body Baking Temperature		℃	⩽ 120			
Power Supply		—	Ue：AC220V 50Hz Use Range: 85% Ue ~110% Ue			
Starting / Working Power		—	600/0.7	800/1	1000/2	1400/3
On Or Off Time		s	Open ⩽ 0.2 / Close ⩽ 0.5			
Operating Frequency		—	⩽ 300			
Valve Position Indication		—	Live indication LED + on signal			
Installation Position		—	Any			
Ambient Temperature		℃	5~40			

APPREARANCE AND FIXING DIMENSION DRAWING



DN16-50

DN16-50

MODEL	DN	Dimension Table (mm) A	B	C	D	E	F	G
GD-J6~10(B)	6~10	90.4	6~10	35	36	53	32	—
GD-J16(B)	16	110	16	40	46	63	40	35
GD-J25(B)	25	120	25	50	54	77	50	43
GD-J40(B)	40	151	40	65	74	102	60	61
GD-J25(B)	25	120	25	50	54	77	50	43
GD-J40(B)	40	151	40	65	74	102	60	61
GD-J25(B)	25	120	25	50	54	77	50	43
GD-J40(B)	40	151	40	65	74	102	60	61

GD SERIES HV MANUAL VALVE PARAMETER

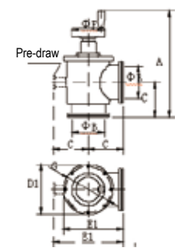
MODEL			GD-J63(B)	GD-J80(B)	GD-J100(B)	GD-S160B
DN		mm	63	80	100	150
Pressure Range		Pa	1×10^{-5}~3×10^{5} (1×10^{-6}~3×10^{5})			
Pressure Differential	Opening Direction	Pa	$\leqslant 1.0\times10^{5}$			
	Closure Direction	Pa	$\leqslant 3\times10^{5}$			
Opening Pressure Differential		Pa	$\leqslant 1.0\times10^{5}$ Any Orientation			
Leak Rate		Pa·L/s	$\leqslant 1.3\times10^{-7}$			
Switching Cycles		—	800 000			
Conductance		L/s	160	200	440	1000
Temperature		℃	⩽ 120			
Opening/Closure Time		s	Manual Operation Time			
Position Indication		—	Mechanical Indicator			
Installation Position		—	Any			
Ambient Temperature		℃	5~40			

GDQ SERIES HV PNEUMATIC VALVE PARAMETER

MODEL			GDQ-J63(B)	GDQ-J80(B)	GDQ-J100(B)	GDQ-J160(B)	GDQ-S200(B)	GDQ-S250(B)
DN		mm	63	80	100	150	200	250
Pressure Range		Pa	1×10^{-5}~3×10^{5}(1×10^{-6}~3×10^{5})					
Pressure Differential	Opening Direction	Pa	$\leq 1.0\times10^{5}$					
	Closure Direction	Pa	$\leq 3\times10^{5}$					
Opening Pressure Differential		Pa	$\leqslant 1.0\times10^{5}$ Any Orientation					
Leak Rate		Pa·L/s	$\leqslant 1.3\times10^{-7}$					
Switching Cycles		—	1 Million Times					
Conductance		L/s	4.5	14	45	80	45	80
Temperature		℃	⩽ 120					
Power		—	A/C 220V 50Hz or D/C 24V,3W,					
Opening/Closure Time		s	16	25	40	50	50	50
Compressed Air		MPa	0.4~0.7					
Position Indication		—	Magnetic Switch					
Installation Position		—	Any					
Ambient Temperature		℃	5~40					

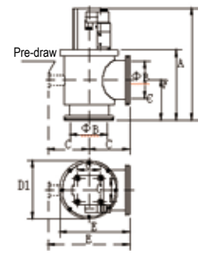
APPREARANCE AND FIXING DIMENSION

DN63-250 MANUAL TYPE



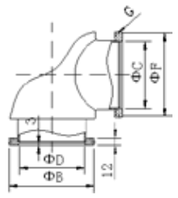
MODEL	DN	Dimension Table (mm) A	B	C	D	E	F	G	-
GD-J63B)	63	280	63	88	123	149.5	80	111	-
GD-J80(B)	80	295	80	98	133	164.5	80	121	-
GD-J100(B)	100	328.5	99	108	154	185	100	142	-
GD-S160(B)	150	393	153	138	235	255.5	100	220	-

DN63-250 PNEUMATIC TYPE



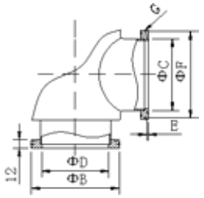
MODEL	DN	Dimension Table (mm) A	B	C	D	E	F	G	-
GDQ-J63(B)	63	255	63	88	108	142	154	40	—
GDQ-J80(B)	80	267	80	98	118	157	168.5	50	—
GDQ-J100(B)	100	306	100	108	137	176.5	190	60	—
GDQ-J160(B)	150	406.5	153	138	208	242	253.5	94	—
GDQ-S200(B)	200	503	200	178	258	356	320	94	KF50
GDQ-S250(B)	250	608	250	208	310	416	410	94	LF63

FLANGE SIZE



LF flange

LF flange						
DN	63	80	100	160	200	250
B	95	110	130	180	240	290
C	70	83	102	153	213	261
D	63	80	99	153	200	250
E	—	—	—	—	—	—
F	92	107	127	175	235	285
G	1.5	1.5	1.5	2.5	2.5	2.5



GB-LP flange

GB-LP flange						
DN	63	80	100	160	200	250
B	95	110	130	180	240	290
C	68	85	105	165	208	258
D	63	80	99	153	200	250
E	2.4	2.4	2.4	2.4	3.6	3.6
F	92	107	127	175	235	285
G	1.5	1.5	1.5	2.5	2.5	2.5

OIL / VACUUM FLANGE AND FITTING

VACUUM PUMP OIL

BSO68 is used for two-stage oil rotary vane vacuum pumps; BSO46 is used for Roots vacuum pumps;
BSO100 is used for single-stage oil rotary vane vacuum pumps.

BSO46

BSO68

BSO100

OIL MIST FILTER

When the oil rotary vacuum pump is operated at atmospheric pressure or under low vacuum, the oil will be discharged together with the gas which has been pumped. This kind of exhaust gas is composed of many tiny oil droplets, and exhausted in the form of smoke through the pump outlet. The oil mist filter is used to ensure a clean environment to protect the equipment from oil mist pollution.

MODEL	BSF10	BSF30		BSF120
Filter Model	10L	30L		120L
Maximum Processing Flow M^3/h (L/min)	36(10)	108(30)		432(120)
Air Inlet	KF25	KF40		VF50
Exhaust Vent	KF25	KF40		G4
Applicable Pump	DRV10/ DRV16 DRV24	BSV30/40 (For high loads)	BSV60/90 (For low loads)	BSV175 BSV275
Weight (kg)	1	7.4		40

VACUUM FLANGE AND FITTING

Note: The following illustration shows that some products are subject to various standard and non-standard product customization.

MEMORANDUM