BAOSI VACUUM

VACUTECH
Based on innovation

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

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BAOSI VACUUM

NINGBO BAOSI ENERGY EQUIPMENT CO., LTD.

2023 PRODUCT CATALOGUE
VACUUM PUMP

- OIL ROTARY VANE VACUUM PUMP
- ROOTS VACUUM PUMP
- SCREW DRY VACUUM PUMP
- SCROLL DRY 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 VACUUM SEGMENT

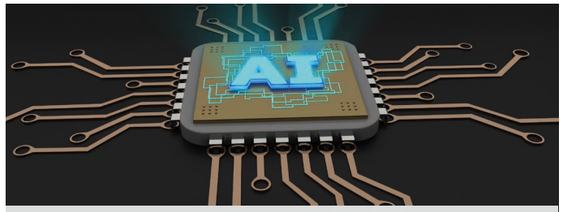
In 2011, Baosi established vacuum business division, which specialized in design, manufacturing and sales of vacuum products. And in 2018, vacuum division developed into Vacuum Group.

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.

INDUSTRY INVOLVED

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


Printing

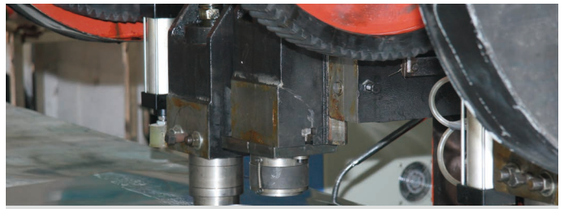


Semiconductor and Flat Displa


Solar Energy


Wind Energy

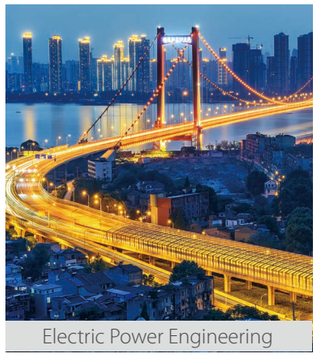

Vacuum Package


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

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SINGLE STAGE ROTARY VANE VACUUM PUMP

SRV300B

SRV630[750]A/W

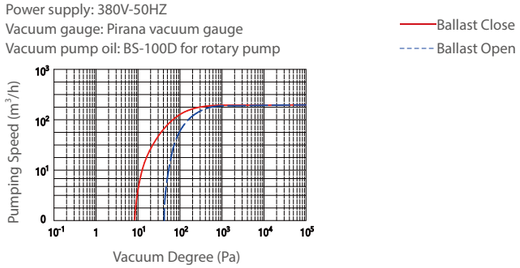
FEATURES

- 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

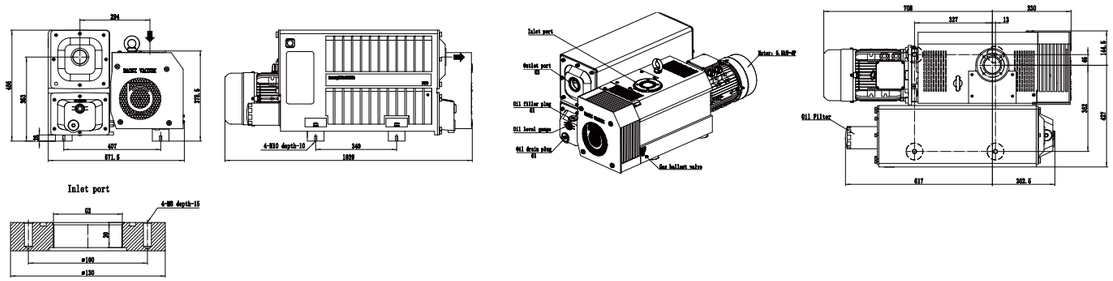
SRV300B

Power supply: 380V-50HZ
Vacuum gauge: Pirana vacuum gauge
Vacuum pump oil: BS-100D for rotary pump



INSTALLATION DIAGRAM

SRV300B



SRV300B TECHNICAL PARAMETER

MODEL		50Hz	60Hz
Nominal speed	m^3/h	300	340
Pumping speed	m^3/h	240	290
Ultimate pressure	Pa	≤8	
Ultimate pressure (with all gas ballast)	Pa	≤200	
Motor Power	kW	5.5	
Rated rotation speed	rpm	1450	1750
Oil capacity(min /max)	L	9/12	
Weight	kg	200	
Inlet		G2/VG50	
Outlet		G2	

BAOSI VACUUM

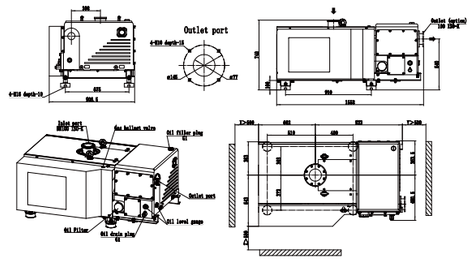
SRV630[750]A/W TECHNICAL PARAMETER

MODEL				SRV630A	SRV630W	SRV750A	SRV750W
Pumping speed	50Hz		m^3/h	630	630	755	755
	60Hz		m^3/h	755	755	/	
Ultimate pressure	(without gas ballast)		Pa	≤8			
Ultimate pressure	(with one gas ballast)		Pa	≤70			
Ultimate pressure	(with two gas ballast)		Pa	≤200			
Water vapour tolerance	with one gas ballast	50Hz	Pa	4000	2500	5000	3000
		60Hz	Pa	5000	3000	/	
	with two gas ballast	50Hz	Pa	6000	3500	7000	4000
		60Hz	Pa	7000	4000	/	
Water vapour capacity	with one gas ballast	50Hz	kg/h	17	11	24	14
		60Hz	kg/h	24	14	/	
	with two gas ballast	50Hz	kg/h	26	15	34	19
		60Hz	kg/h	34	19	/	
Noise	50Hz		dB(A)	76		75	
	60Hz		dB(A)	78		/	
Motor power			kW	15		18.5	
Motor rotation speed	50Hz		rpm	1460		1470	
	60Hz		rpm	1750		/	
Level of protection				IP55			
Cooling method				air	water	air	water
Cooling water	Differential pressure		MPa	/	≥0.1	/	≥0.1
	Flow		L/min	/	≥3.0	/	≥3.0
	Temperature		°C	/	5~30	/	5~30
Weight(With oil)			kg	695	695	760	760
Oil				BSO-100			
Oil capacity(min/max)			L	25/28			
Intake				DN100ISO-K			
Exhaust				See the installation diagram			

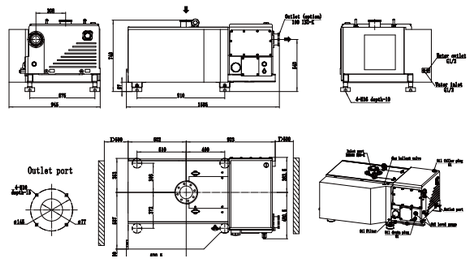
- Tested at the ultimate pressure without gas ballast, free-field measured at a distance of 1m

INSTALLATION DIAGRAM

SRV630A&750A



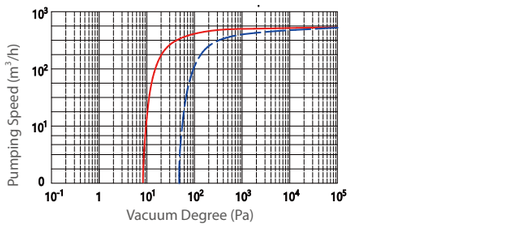
SRV630W&750W



PUMP RATE CURVE

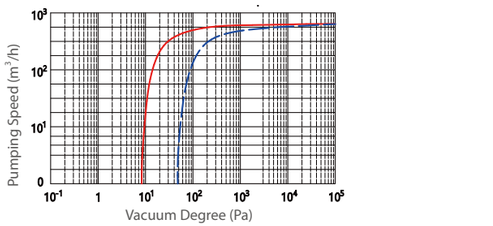
SRV630A/W

Power: 380V-50HZ
Vacuum gauge: Pirana vacuum gauge
Vacuum pump oil: MR-250 for rotary pump



SRV750A/W

Power: 380V-50HZ
Vacuum gauge: Pirana vacuum gauge
Vacuum pump oil: MR-250 for rotary pump



BAOSI VACUUM

OIL ROTARY VANE VACUUM PUMP

TWO STAGE ROTARY VANE VACUUM PUMP

DRV3[5 10 16 24]

DRV30[40 60 90]

DRV175[275]

DRV SERIES TECHNICAL PARAMETER

MODEL			DRV3	DRV5	DRV10	DRV16	DRV24
Pumping speed	50Hz	m^3/h	3.6	5.4	9.9	14.4	22
	60Hz	m^3/h	4.3	6.5	12	17.4	26
Ultimate pressure	Gas ballast off	Pa			$\leq 5X10^{-1}$		
	Gas ballast on	Pa			≤5		≤4
Motor power (4P)	380V(3ph)	kW		0.4		0.55	0.75
	220V(1ph)	kW					
Inlet					KF25/KF16		KF25/KF40
Outlet					KF25		
Vacuum pump oil					BSO-46		
Oil capacity		L	0.7	0.7	1.1	1.2	1.7
Weight		kg	22.5	22.5	25	27	38

MODEL			DRV30	DRV40	DRV60	DRV90
Pumping speed	50Hz	m^3/h	30	40	60	84
	60Hz	m^3/h	35	48	70	100
Ultimate pressure	Gas ballast off	Pa			$\leq 5X10^{-1}$	
	Gas ballast on	Pa			≤4	
Motor power (4P)	380V(3ph)	kW	1.1	1.5	2.2	2.2
	220V(1ph)	kW	1.1	1.5	2.2	/
Lubricating Oil Specification					BSO-68	
Oil Capacity		L	1.9	2.1	5	5.5
Inlet		DN		KF40/KF25		KF40
Outlet		DN		KF40		KF40
Noise	Gas Ballast off	dB		≤63		≤65
Weight(3ph)		kg	~43	~50	~81	~85

MODEL			DRV175	DRV275
Pumping speed	50Hz	m^3/h	160	255
	60Hz	m^3/h	196	306
Motor rotary speed	50Hz	r/min	1440	
	60Hz	r/min	1720	
Ultimate vacuum	Gas ballasting off	Pa	$\leq 5\times10^{-1}$	
	Gas ballasting on	Pa	≤2	
Maximum outlet pressure	(G)	MPa	0.05	
Inlet	Flange with O-ring	DN	VG80	
Outlet	Flange with O-ring	DN	VG50	
Oil capacity	min/max	L	20~25	23~28
Noise	one meter away	dB(A)	75	
Weight	no oil/with oil	kg	201/210	217/236

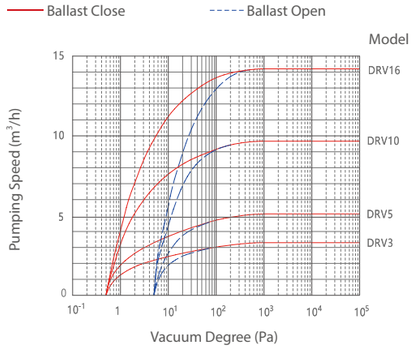
- The value of 'ultimate pressure' in the sheet is measured by Pirani gauge when the Baosi special pump oil is used, and the value should be 5X10-2, if the Mcleod gauge be used.
- Therefore, the Baosi special pump oil is recommended to guarantee the pump performance.

BAOSI VACUUM

PUMP RATE CURVE

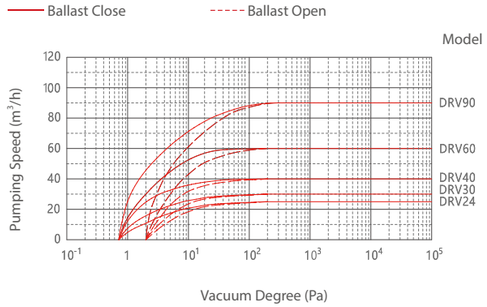
DRV3[5 10 16]

Power: 380V 50HZ
Vacuum gauge: Pirani Vacuum gauge
Vacuum pump oil: BSO-46 for rotary pump



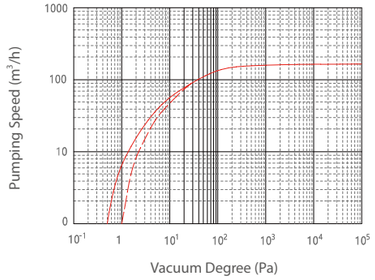
DRV24[30 40 60 90]

Power: 380V 50HZ
Vacuum gauge: Pirani Vacuum gauge
Vacuum pump oil: BSO-68 for rotary pump



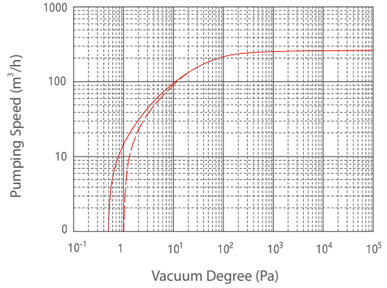
DRV175

Power: 380V 50HZ
Vacuum gauge: Pirani vacuum gauge
Vacuum pump oil: BSO-68 for rotary pump



DRV275

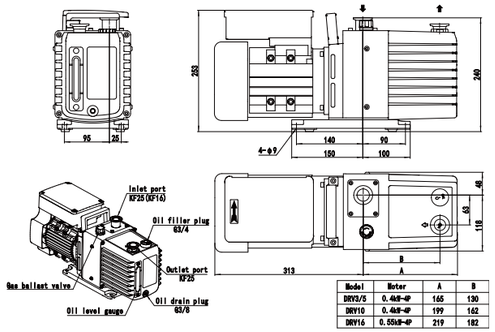
Power: 380V 50HZ
Vacuum gauge: Pirani vacuum gauge
Vacuum pump oil: BSO-68 for rotary pump



BAOSI VACUUM

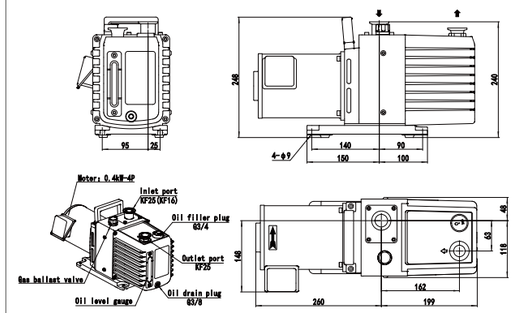
INSTALLATION DIAGRAM

DRV3[5 10 16] single phase

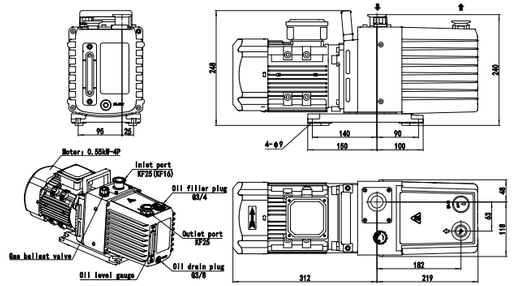


Model	Moter	A	B
DRV3/5	0.4kW-4P	165	130
DRV10	0.4kW-4P	199	162
DRV16	0.55kW-4P	219	182

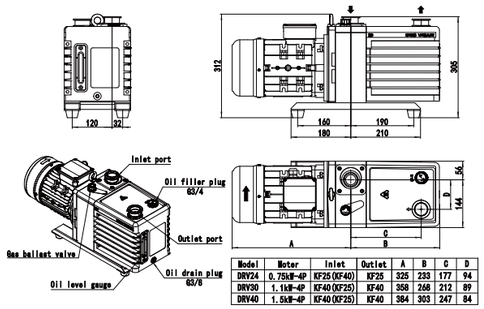
DRV10 triphase



DRV16 triphase

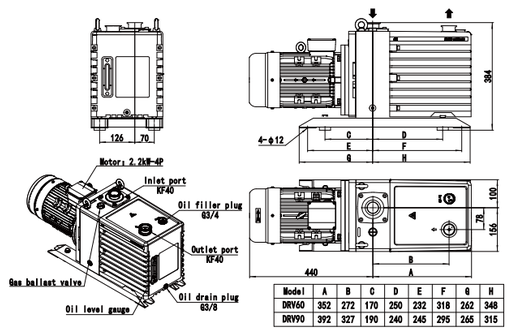


DRV24[30 40] triphase



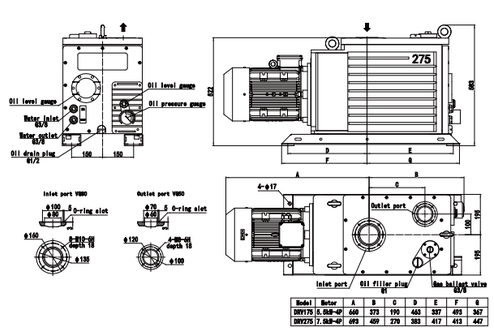
Model	Moter	Inlet	Outlet	A	B	C	D
DRV24	0.75kW-4P	KF25(KF40)	KF25	325	233	177	94
DRV30	1.1kW-4P	KF40(KF25)	KF40	358	246	212	89
DRV40	1.5kW-4P	KF40(KF25)	KF40	384	303	247	84

DRV60[90] triphase



Model	A	B	C	D	E	F	G	H
DRV60	352	272	170	250	232	318	262	348
DRV90	392	327	190	240	245	295	265	315

DRV175[275] triphase



ROOTS VACUUM PUMP

BSJ100Z [70L 150L 300L]

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.
- The BSJ-L series is made of all-aluminum alloy, heat sink, corrosion resistance, and efficient energy saving.The BSJ-LC series is made of cast iron. The unique liquid coupling method enables the pump to start directly under the atmosphere, which greatly reduces the time of pumping.
- Compact structure, light weight, and small volume.

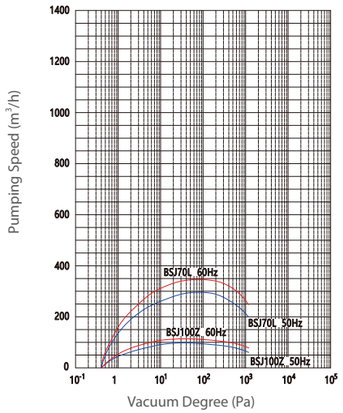
DIRECT DRIVE TECHNICAL PARAMETER

MODEL			BSJ100Z	BSJ70L	BSJ150L	BSJ300L
Pumping speed*1	50Hz	m^3/h (L/min)	95(1580)	280(4670)	500(8330)	1000(16667)
	60Hz	m^3/h (L/min)	115(1920)	330(5500)	600(10000)	1200(20000)
Max Inlet Pressure*1 (continuous operation)	50Hz	Pa	$1.3x10^3$	$1.2x10^3$	$1.3X10^3$	
	60Hz	Pa	$1.3x10^3$	$9.3X10^2$	$1.1X10^3$	
Max allowable differential pressure	50Hz	Pa	$8x10^3$	$4.0X10^3$	$7.3X10^3$	
	60Hz	Pa	$6.7x10^3$	$3.3X10^3$	$6.0X10^3$	
Ultimate pressure*2		Pa		$4.0X10^{-1}$		
Motor(2P)		kW	0.4	0.75	2.2	3.7
Oil capacity(BSO-46)		L	0.4	0.8	1.6	2
Cooling water	Flow	L/min	/	2*3	2	3
	Pressure	MPa	/		0.1	
	Temperature	℃	/		5~30*4	
Weight		kg	30	51	79.5	115
Inlet			VG50	VG80	VG80	VG100
Outlet			VF50	VF80	VF80	VF80

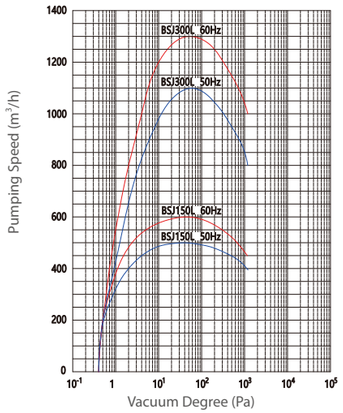
- *1 The value changes depending on the performance of the fore pump. The above data is obtained when the pump is used in combination with a standard fore pump.
- *2 The value is measured by using a Pirani gauge. It is approx. one digit lower when a McLeod gauge is used.
- *3 Air cooling is abailable when the pressure is lower than 530Pa. Water cooling is required in continuous operation at a pressure higher than 530Pa.
- *4 The cooling water temperature of inlet port must be 5~30℃ When the temperature is too low, keep it in an environment that is not easy to condense.

DIRECT DRIVE PUMP RATE CURVE

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



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



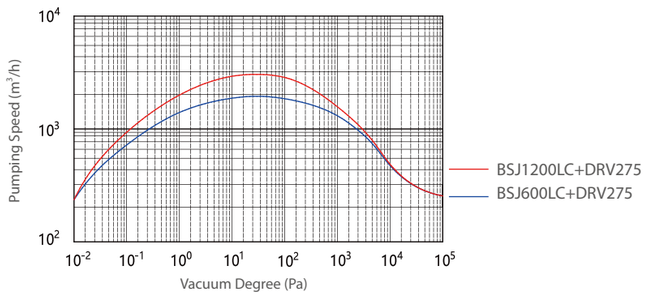
HYDRAULIC COUPLING TECHNICAL PARAMETER

MODEL			BSJ600LC	BSJ1200LC
Pumping speed*1	50Hz	m^3/h	2590	4140
	60Hz	m^3/h	3110	4985
Max Inlet Pressure*1 (continuous operation)	50Hz	Pa	1.0×10^5	
	60Hz	Pa	1.0×10^5	
Max allowed*1 differential pessure	50Hz	Pa	8.0×10^3	6.0×10^3
	60Hz	Pa	6.7×10^3	5.0×10^3
Ultimate Pressure*2		Pa	0.4	
Motor Power (2P)		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	
Cooling water	Flow	L/min	6	
	Pressure	MPa	0.2~0.6	
	Temperature	℃	5~35*4	
Weight		kg	350	420
Inlet			ISO160	ISO250
Outlet			ISO100	

- *1 The value changes depending on the performance of the fore pump. The above data is obtained when the pump is used in combination with a standard fore pump.
- *2 The value is measured by using a Pirani gauge. It is approx. one digit lower when a McLeod gauge is used.
- *3 Air cooling is abailable when the pressure is lower than 530Pa. Water cooling is required in continuous operation at a pressure higher than 530Pa.
- *4 The cooling water temperature of inlet port must be 5~30℃ When the temperature is too low, keep it in an environment that is not easy to condense.

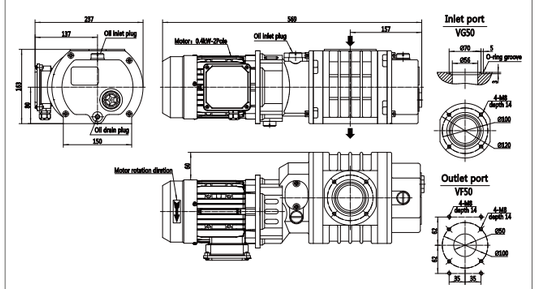
HYDRAULIC COUPLING PUMP RATE CURVE

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

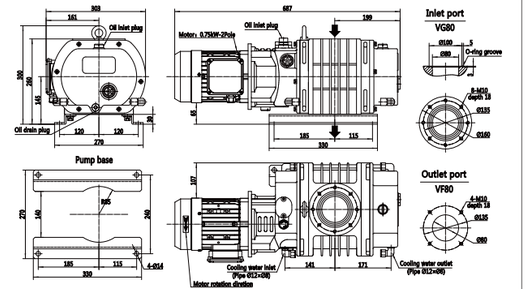


INSTALLATION DIAGRAM

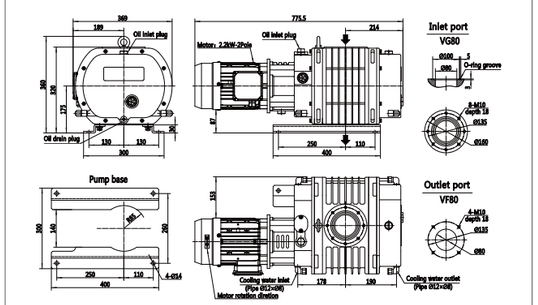
BSJ100Z



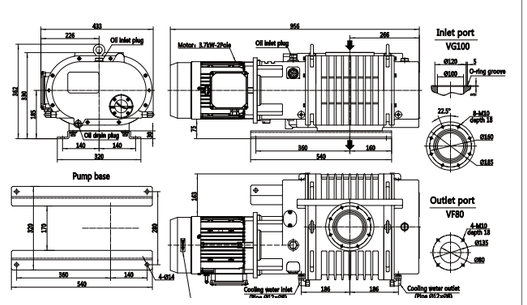
BSJ70L



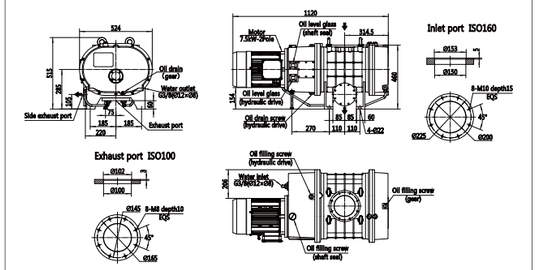
BSJ150L



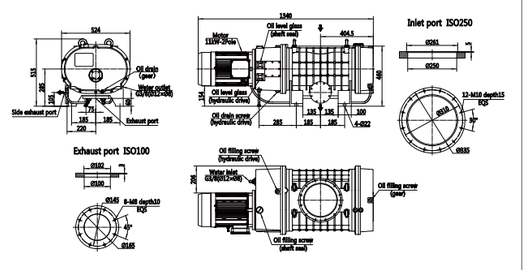
BSJ300L



BSJ600LC



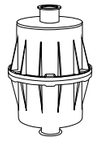
BSJ1200LC

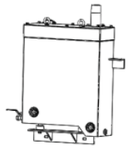


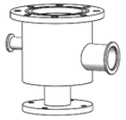
VACUUM PUMP UNIT SERIES

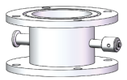
Standard configuration : frame, connection pipes, casters, oil drain ball valve
Options: inverter, electric control panel, oil mist filter, inlet flange(vent valve+vacuum sensor end), flapper valve, inlet filter, vacuum pipe assembly, vacuum gauge

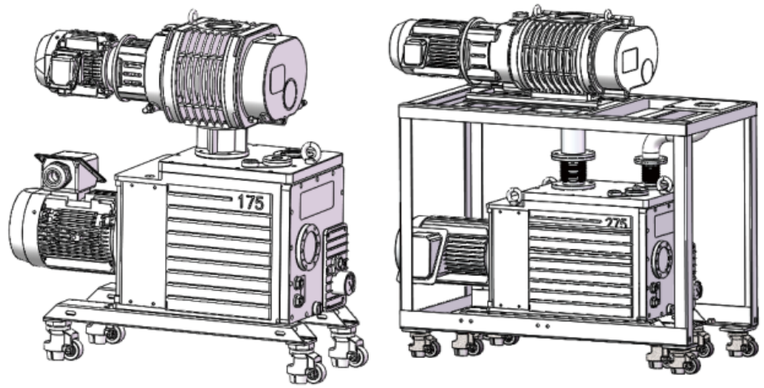
Recommended Pump System	
Roots Vacuum Pump	Rotary Vacuum Pump
BSJ100Z	BSV30/DRV30
BSJ70L	BSV40/DRV40
BSJ150L	BSV60/DRV60
BSJ300L	BSV175/DRV175
	BSV275/DRV275
	SRV300B
BSJ600LC	BSV275/DRV275
	SRV300B
	SRV630A/SRV630W
	SRV750A/SRV750W
BSJ1200LC	BSV275/DRV275
	SRV630A/SRV630W
	SRV750A/SRV750W

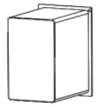

Oil mist Filter


Oil mist Filter


Inlet Filter

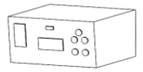

Inlet Flange




Inverter


Flapper Valve


Vacuum Gauge


Electric Control Panel

BAOSI VACUUM

SCREW DRY VACUUM PUMP


GSD Series


GSC Series

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.

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.

BAOSI VACUUM

APPLICATION SOLUTION

The various of vacuum pump we produce can provide you with the best performance solutions.
The following table are the typical application of dry screw vacuum pump. For other application, please contact us for advice.

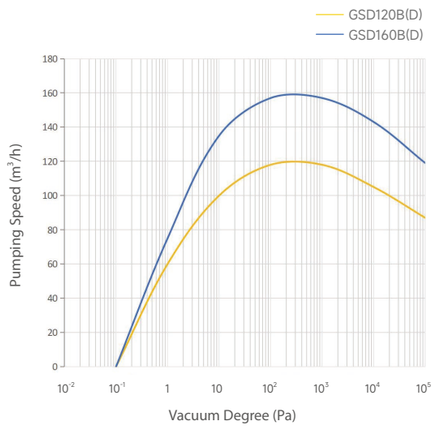
	Purging mode			Accessories	
Application	Low loading Sealed purging	Medium loading Sealed purging+ ilution purging+ inlet purging when starting and stopping	High loading Medium loading +High flow purging or flux rinse when stopping	Inlet filter Metal net	Silencer Washable
Annealing	★				
CVI CVD		★	★	★	★
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

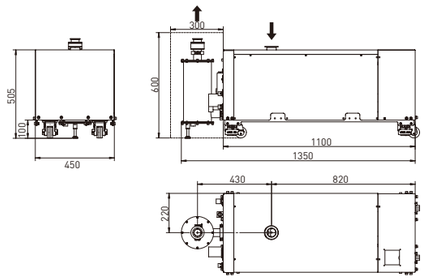
MODEL			GSD120B(D)	GSD160B(D)
Pumping speed(without purging)		m³/h	120	160
Ultimate Pressure(without purging)		Pa	≤5x10^{-1}	
Motor	Motor power	kW	7.5	
	Voltage(3ph)	V	380、400	
Interface	Inlet		KF40	
	Outlet		KF40	
Cooling Water	Pressure	MPa	1x10^{-1}~4x10^{-1}	
	Flow	L/min	≥4	
	Temperature	℃	5~30	
	Interface		G3/8	
N_2 Purging	Pressure	MPa	2x10^{-1}~6x10^{-1}	
	Flow	L/min	12~50	
	Interface		G1/4	
Max Allowed Outlet Pressure		MPa	1.4x10^{-1}	
Noise(with silencer and check valve)		dB	≤70	
Ambient Temperature		℃	5~40℃ ; below 90%RH	
Weight		kg	~350/~365	

PUMPING RATE CURVE

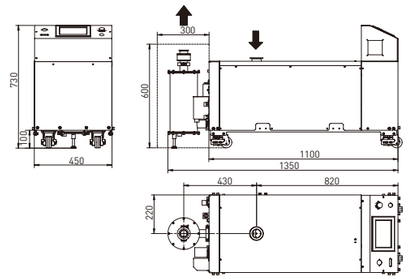


INSTALLATION DIAGRAM

GSD120B&GSD160B



GSD120D&GSD160D

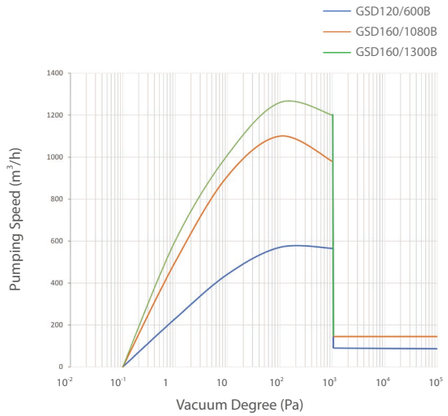


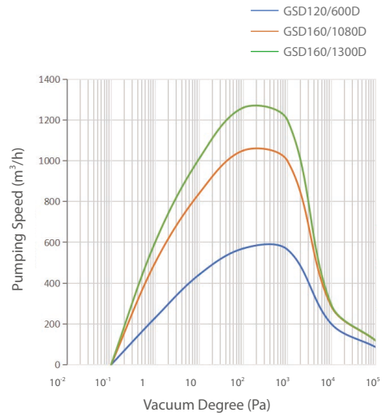
BAOSI VACUUM

GSD SERIES PUMP SYSTEM

MODEL			GSD120/600B(D)	GSD160/1080B(D)	GSD160/1300B(D)
Pumping speed(without purging)		m³/h	600	1080	1300
Ultimate Pressure(without purging)		Pa		≤1x10^{-1}	
Motor	Motor power	kW	7.5+2.2	7.5+3.7	7.5+3.7
	Voltage(3ph)	V		380、400	
Interface	Inlet		VG80	VG100	VG100
	Outlet			KF40	
Cooling water	Pressure	MPa		1x10^{-1}~4x10^{-1}	
	Flow	L/min		≥4	
	Temperature	℃		5~30	
	Interface			G3/8	
N_2 Purging	Pressure	MPa		2x10^{-1}~6x10^{-1}	
	Flow	L/min		12~50	
	Interface			G1/4	
Max Allowed Outlet Pressure		MPa		1.4x10^{-1}	
Noise(with silencer and check valve)		dB	≤70	≤72	≤72
Ambient Temperature		℃		5~40 ℃ / Below 90% RH	
Weight		kg	~450/~480	~495/~520	~520

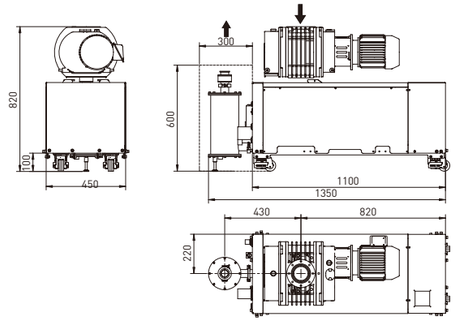
PUMPING RATE CURVE



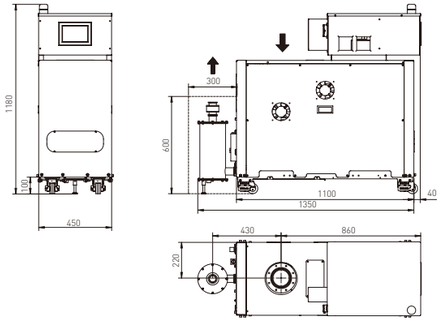


GSD INSTALLATION DIAGRAM

GSD120/600B&GSD160/1080B&GSD160/1300B



GSD120/600D&GSD160/1080D&GSD160/1300D

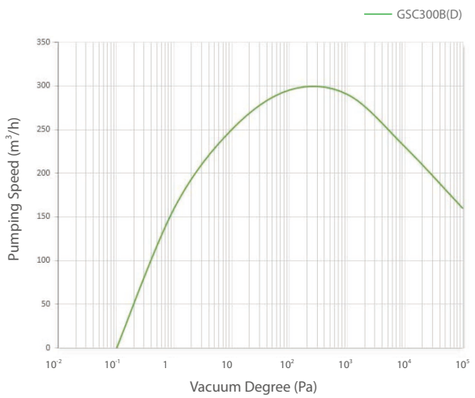


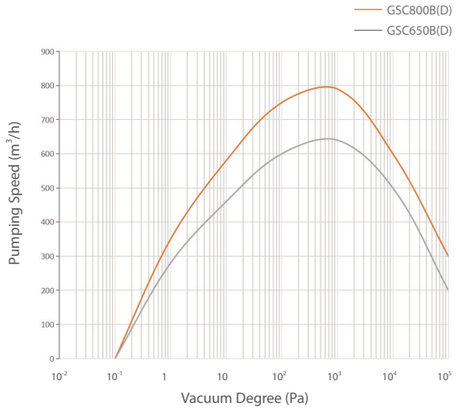
BAOSI VACUUM

GSC SERIES PUMP

MODEL			GSC300B(D)	GSC650B(D)	GSC800B(D)
Pumping speed(without purging)		m³/h	300	650	800
Ultimate Pressure(without purging)		Pa		$\leq 5\times10^{-1}$	
Motor	Motor power	kW	5.5	18.5	22
	Voltage(3ph)	V		380、400	
Interface	Inlet		KF50	ISO100	
	Outlet		KF40	KF50	
Cooling Water	Pressure	MPa	1×10^{-1}~4×10^{-1}	2×10^{-1}~6×10^{-1}	
	Flow	L/min	≥4		≥7
	Temperature	℃		5~30	
	Interface		G3/8	G1/2	
Purging	Pressure	MPa		2×10^{-1}~6×10^{-1}	
	Flow	L/min	12~50	50~90	
	Interface			G1/4	
Max Allowed Outlet Pressure		MPa		1.40×10^{-1}	
Noise(with silencer and check valve)		dB	≤70	≤72	
Ambient Temperature		℃		5~40℃ ; below 90%RH	
Weight		kg	~350/~365	~580/~680	~600/~700

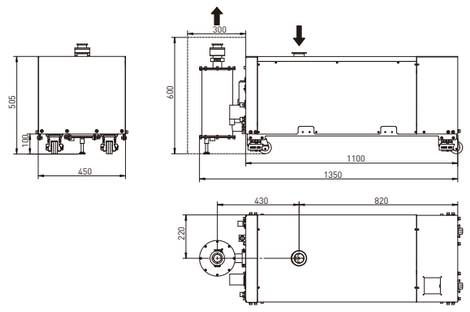
PUMPING RATE CURVE



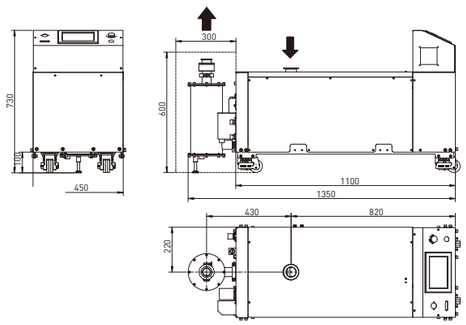


GSC INSTALLATION DIAGRAM

GSC300B

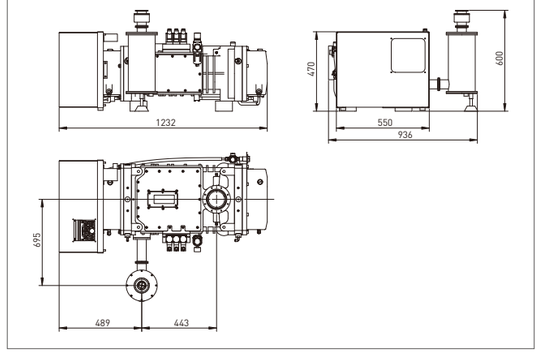


GSC300D

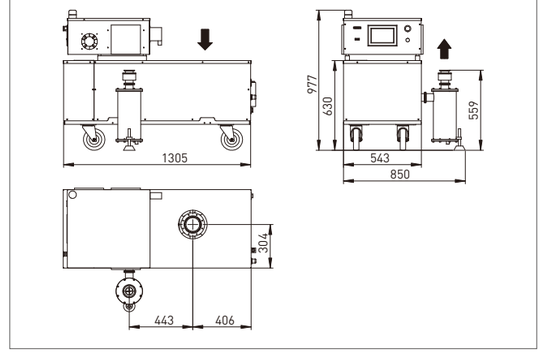


BAOSI VACUUM

GSC650B&GSC800B



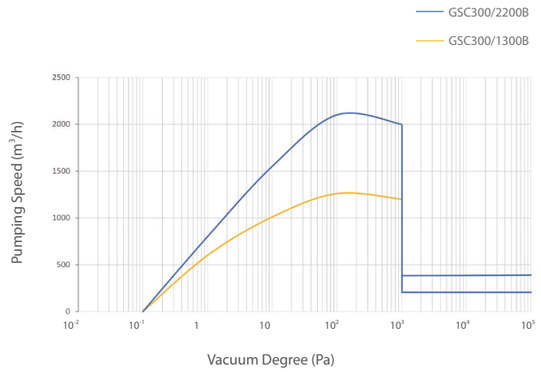
GSC650D&GSC800D

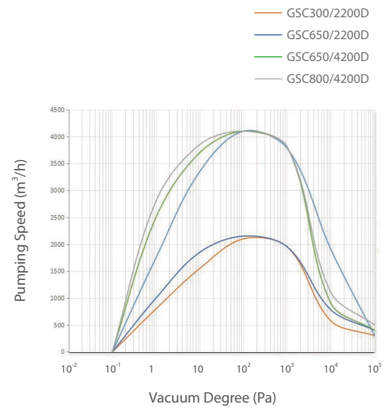


GSC SERIES PUMP SYSTEM

MODEL			GSC300/1300B	GSC300/2200B(D)	GSC650/2200D	GSC650/4200D	GSC800/4200D
Pumping speed(without purging)		m³/h	1300	2200	2200	4200	
Ultimate Pressure(without purging)		Pa			$\leq 1\times10^{-1}$		
Motor	Motor power	kW	5.5+3.7	5.5+7.5	18.5+7.5	18.5+11	22+11
	Voltage(3ph)	V			380、400		
Interface	Inlet		VG100	ISO160	ISO160	ISO250	
	Outlet		KF40			KF50	
Cooling Water	Pressure	MPa	1×10^{-1}~4×10^{-1}			2×10^{-1}~4×10^{-1}	
	Flow	L/min	≥4	≥6		≥12	
	Temperature	℃			5~30		
	Interface		G3/8			G1/2	
Purging	Pressure	MPa			2×10^{-1}~6×10^{-1}		
	Flow	L/min	12~50	12~88		23~90	
	Interface				G1/4		
Max Allowed Outlet Pressure		MPa			1.4×10^{-1}		
Noise(with silencer and check valve)		dB	≤72	≤75/≤72			
Ambient Temperature		℃			5~40 °C / Below 90% RH		
Weight		kg	~495	~780/~925	~1060	~1250	

PUMPING RATE CURVE

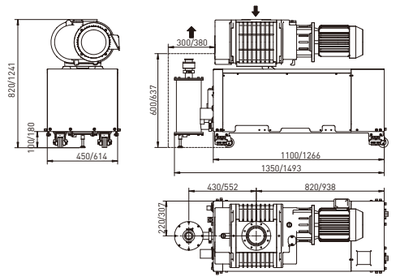




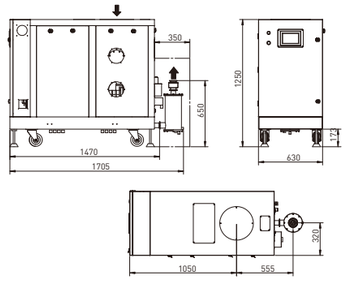
SCREW DRY VACUUM PUMP

GSC INSTALLATION DIAGRAM

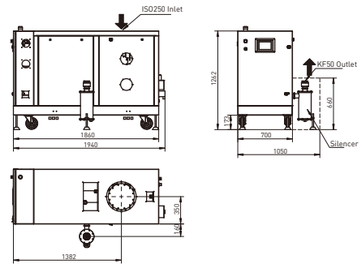
GSC300/1300B&GSC300/2200B



GSC300/2200D

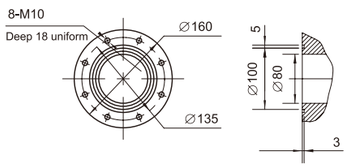


GSC650/2200D&GSC650/4200D&GSC800/4200D

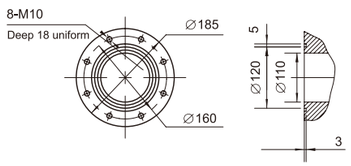


FLANGE SIZE

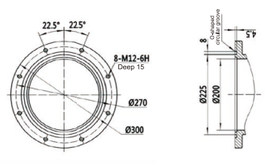
Single pump inlet flange is KF50 or KF40. Vacuum system inlet flange is VG80/ VG100 or VG200 as following size.



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.

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.

Silencer

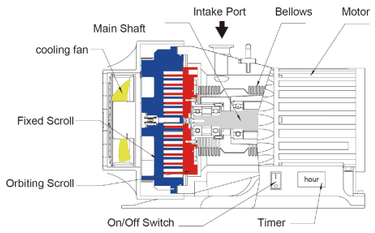
In order to reduce the noise of the exhausting,it's absolutely necessary to equip the silencer of the pump. We provide customers with standard silencer as well as a variety of silencer customization service according to the working conditions.

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 DRY VACUUM PUMP

IDSP6[10 16 36 45]

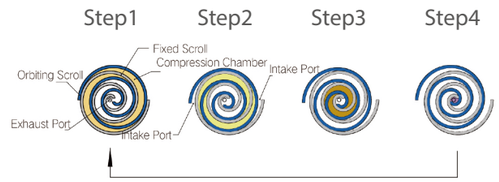


Scroll pump is a new kind of oil-free mechanical pump with features of simple construction, good sealing, high vacuum ect. As a high-technology product, it has highly technical requirement in desigh and manufacture. With benefits of low consumption, long working life, high reliability, and low noise, It has incomparable advantages in the application of clean process and has been popularly used in the market. IDSP 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.

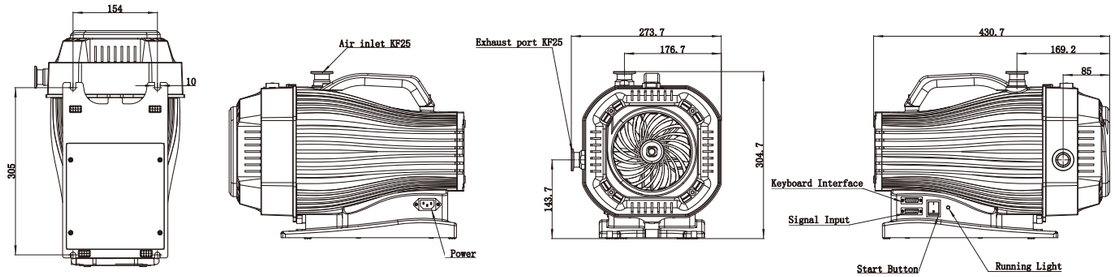
WORKING PRINCIPLE



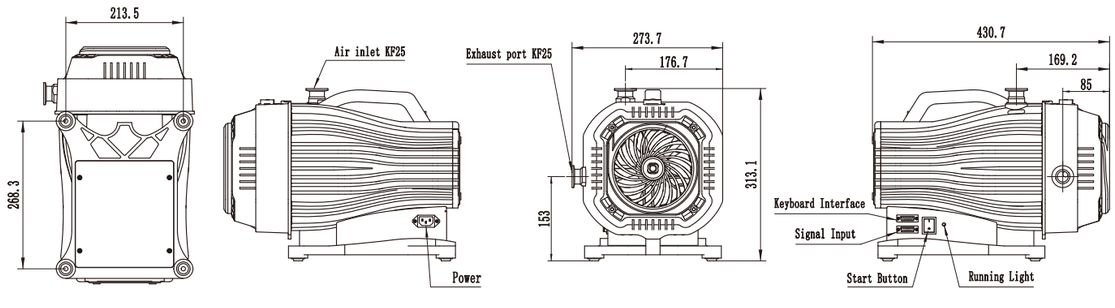
TECHNICAL PARAMENT

MODEL		IDSP6	IDSP10	IDSP16	IDSP36	IDSP45
Nominal speed	L/s	2	3	4	10	12.5
	m^3/h	6	10	16	36	45
Ultimate vacuum	mbar	0.03	0.008	0.008	0.01	0.05
	Pa	3	0.8	0.8	1	5
Leak rate	mbar·L/s			$< 1\times10^{-6}$		
	$Pa\cdot m^3/s$			$< 1\times10^{-7}$		
Input voltage	V			Single phase100-120/200-240		
Motor power	W		400		1100	
Rated motor speed	rpm			1800		
Maximum inlet pressure				ATM		
Dimension	mm	430×274×305		430×274×313(new) 430x274x305(old)	574×335×368	
Noise	dB(A)		54		56	
Inlet			KF25		KF40	
Outlet				KF25		
Water vapor treatment capacity	gh^{-1}	100	136	268	200	
Weight	kg	/	28	29	56	
Cooling mode				Air-cooled		
Ambient Temperature	℃		5~40		10~40	

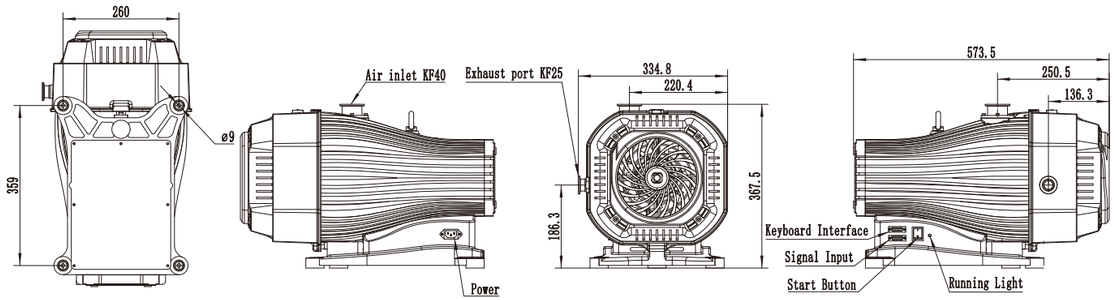
IDSP6/IDSP10/IDSP16(OLD) INSTALLATION DIAGRAM



IDSP16(NEW) INSTALLATION DIAGRAM

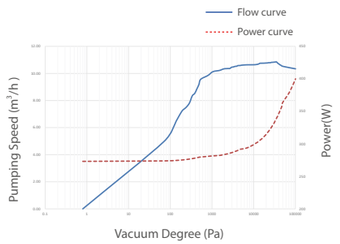


IDSP36 INSTALLATION DIAGRAM

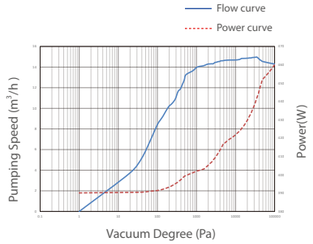


PUMPING RATE CURVE

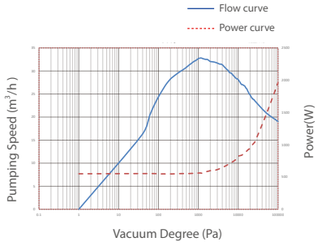
IDSP10



IDSP16



IDSP36



BAOSI VACUUM

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.

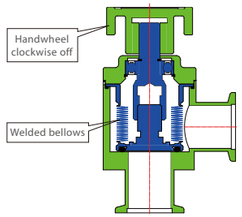
GD SERIES/GDQ SERIES/GDC SERIES HV VALVE FEATURES

- Two position three -way, two position five -way solenoid valve components, quickly combine combinations through simple operations to meet the different needs of customers;
- Standardized, modular design, easy to replace and repair;
- Dust -proof design, suitable for the application of a small amount of dust;
- The dynamic seal is welded with AM350 material with a service life of 800,000 to 1,000,000 times ;
- The pneumatic valve opening/ closed position is a mechanical micro switch and magnetic switch:Micro switch, with sensitive response, reliable output, strong anti -interference.Magnetic switch, can be adjusted in a small range.
- Anodizing surface of the aluminum alloy valve
- Manual and pneumatic valve equipped with mechanical location instructions;
- Electromagnetic parts adopt energy -saving design.

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.

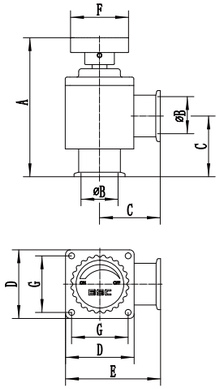
GD SERIES HV MANUAL BAFFLE VALVE PARAMETER



MODEL			GD-J16B	GD-J25B	GD-J40B	GD-J50B
DN		mm	16	25	40	50
Pressure Range		Pa	1×10^{-6} ~ 5×10^{5}			
Differential Pressure	Opening Direction	Pa	$\leq1.2\times10^{5}$			
	Closure Direction	Pa	$\leq5\times10^{5}$			
Opening Pressure Differential		Pa	$\leq1.2\times10^{5}$ Any Orientation			
Leak Rate		Pa·L/s	$\leq1.3\times10^{-7}$			
Switching Cycles		times	1 Million			
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			

BAOSI VACUUM

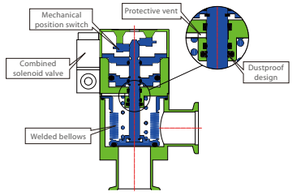
FIXING DEMENSION DRAWING



DN16-50

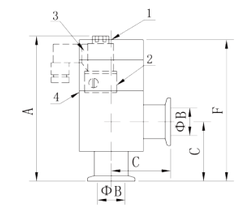
MODEL	DN	Dimension Table (mm)						
		A	B	C	D	E	F	G
GD-J16B	16	110	16	40	46	63	40	35
GD-J25B	25	120	25	50	54	77	50	43
GD-J40B	40	151	40	65	74	102	60	61
GD-J50B	50	165	50	70	78	109	60	65

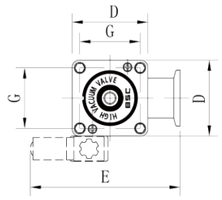
GDQ SERIES HV PNEUMATIC BAFFLE VALVE PARAMETER



MODEL			GDQ-J16(B)	GDQ-J25(B)	GDQ-J40(B)	GDQ-J50(B)
DN		mm	16	25	40	50
Pressure		Pa	1×10^{5} ~ 5×10^{5} (1×10^{-6} ~ 5×10^{5})			
Differential Pressure	Opening Direction	Pa	$\leq1.2\times10^{5}$			
	Closure Direction	Pa	$\leq5\times10^{5}$			
Opening Pressure Differential		Pa	$\leq1.2\times10^{5}$ Any Orientation			
Leak rate		Pa·L/s	$\leq1.3\times10^{-7}$			
Switching Cycles		times	1 Million			
Conductance		L/s	4.5	14	45	80
Temperature		℃	≤120			
Power Supply			A/C 220V 50Hz or D/C 24V,3W,			
Opening/Closure Time		s	≤0.7			
Air Compression		MPa	0.4~0.7			
Position Indication			Passive Switch Signal + Mechanical Indicator			
Installation Position			Any			
Ambient Temperature		℃	5~40			

FIXING DEMENSION DRAWING





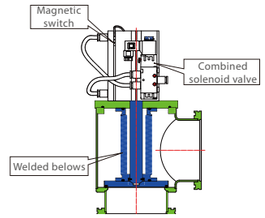
DN16-50

MODEL	DN	Dimension Table (mm)						
		A	B	C	D	E	F	G
GD-J16(B)	16	117	16	40	46	87.8	120.9	35
GD-J25(B)	25	123.5	25	50	54	100.8	127	43
GD-J40(B)	40	147	40	65	74	115.8	163	61
GD-J50(B)	50	163	50	70	78	129.8	187.4	65

- Mechanical position indication
- Compressed air source connection
- Two-position three-way solenoid valve assembly
- Leak detection and venting hole

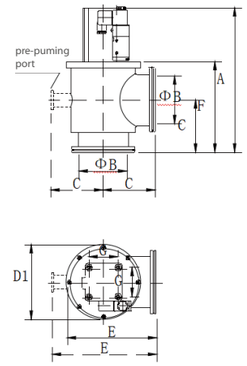
BAOSI VACUUM

GDQ SERIES HV PNEUMATIC BAFFLE VALVE PARAMETER [STAINLESS STEEL]



MODEL			GDQ-J63(B)	GDQ-J100(B)	GDQ-J160(B)	GDQ-S200(B)	GDQ-S250(B)
DN		mm	63	100	150	200	250
Pressure		Pa	1×10^{-5}~3×10^{5}(1×10^{-6}~3×10^{5})				
Differential Pressure	Opening Direction	Pa	$\leq1\times10^{5}$				
	Closure Direction	Pa	$\leq3\times10^{5}$				
Opening Pressure Differential		Pa	$\leq1\times10^{5}$ Any Orientation				
Leak rate		Pa·L/s	$\leq1.3\times10^{-7}$				
Switching Cycles		times	800 000				
Conductance		L/s	160	400	1000	2000	3000
Temperature		℃	≤120				
Power Supply			AC 220V 50Hz,6W or DC24V,3W;Special specifications can be customized				
Opening/Closure Time		s	≤0.8	≤1	≤2	≤2.8	≤3.5
Air Compression		MPa	4×10^{-1}~7×10^{-1}				
Position Indication			Passive Switch Signal + Mechanical Indicator				
Installation Position			Any				
Ambient Temperature		℃	5~40				

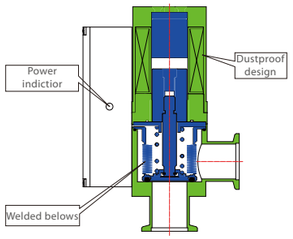
FIXING DEMENSION DRAWING



DN63~250

MODEL	DN	Dimension Table (mm)							
		A	B	C	D1	E	F	G	Pre extraction port
GDQ-J63(B)	63	255	63	88	108	142	154	40	—
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

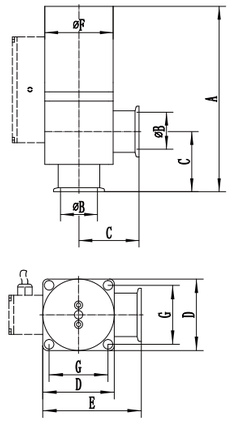
GDC SERIES HV ELCTROMAGNETIC BAFFLE VALVE PARAMETER



MODEL			GDC-J16(B)	GDC-J25(B)	GDC-J40(B)
DN		mm	16	25	40
Pressure		Pa	1×10^{-5}~1×10^{5}(1×10^{-6}~1×10^{5})		
Differential Pressure	Opening Direction	Pa	$\leq1\times10^{5}$		
	Closure Direction	Pa	$\leq5\times10^{5}$		
Opening Pressure Differential		Pa	$\leq1\times10^{5}$ Any Orientation		
Leak rate		Pa·L/s	$\leq1.3\times10^{-7}$		
Switching Cycles		times	200 000		
Conductance		L/s	≤120		
Temperature		℃	Ue: AC220V 50Hz Scope of ues: 85% Ue ~110% Ue		
Power Supply			600/0.7	800/1	1000/2
Opening/Closure Time		s	opens≤ 0.2 closes≤ 0.5		
Air Compression		MPa	≤300		
Position Indication			Passive Switch Signal + Mechanical Indicator		
Installation Position			Any		
Ambient Temperature		℃	5~40		

BAOSI VACUUM

FIXING DIMENSION DRAWING



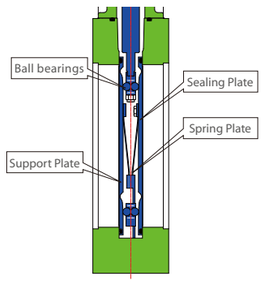
DN63~250

MODEL	DN	Dimension Table (mm)						
		A	B	C	D1	E	F	G
GDC-J16	16	167.5	16	35	48	62.5	44	39
GDC-J16B	16	167.5	16	35	48	62.5	44	39
GDC-J25	25	179.5	25	45	48	73.5	50	44
GDC-J25B	25	187	25	45	56	73.5	50	44
GDC-J40	40	217	40	55	72	91.5	66	57
GDC-J40B	40	221	40	55	78	94.5	73	63

GCQ SERIES HV PNEUMATIC GATE VALVE FEATURES

- Separate valve body design for easy maintenance and cleaning;
- No roller design, small friction in the valve body, conducive to clean, and low noise and low impact when moving;
- Mechanically lock the closed state of the valve to ensure that the valve can still be sealed reliably when the gas or electricity is cut off;
- Aluminum alloy valve body with anodized surface;
- Magnetic switch, position adjustable within a small range;
- Fewer parts for cost control.
- Service life : > 10,000 times

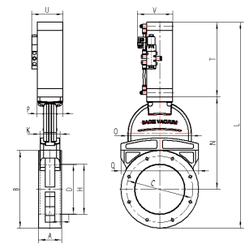
GCQ SERIES HV PNEUMATIC GATE VALVE PARAMETER [STAINLESS STEEL]



MODEL			GCQ-100	GCQ-160	GCQ-200	GDQ-250
DN		mm	100	150	200	250
Pressure		Pa		1×10^{-5}~1.6×10^{5}		1×10^{-5}~1.2×10^{5}
Differential Pressure	Opening Direction	Pa		≤1×10^{5}		
	Closure Direction	Pa		≤1.6×10^{5}		≤1.2×10^{5}
Opening Pressure Differential		Pa		≤3×10^{3} Any Orientation		
Leak rate		Pa·L/s		≤1×10^{-7}		
Switching Cycles		times		100 000		80 000
Conductance		L/s	2000	6000	12000	22000
Temperature		℃		≤120		
Power Supply				AC 220V 50Hz,6W or DC24V,3W;Special specifications can be customized		
Opening/Closure Time		s	2	2.5	3.5	5
Air Compression		MPa		4×10^{-1}~7×10^{-1}		
Position Indication				Magnetic Switches		
Installation Position				Any		
Ambient Temperature		℃		5~40		

VACUUM VALVES

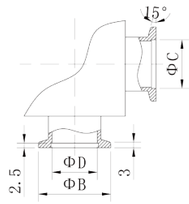
FIXING DIMENSION DRAWING



DN63~250

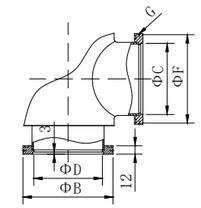
MODEL	GCQ-160	GCQ-200	GDQ-250
A	70	80	100
B	235	288	350
D	150	200	250
H	153	213	261
K	60	68	80
P	78	96	96
U	94	112	112
V	106	124	124
O	192	242	308
Q	235	288	352
C	200	260	310
N	279.8	363.5	453
T	261	311	316
L	658.3	818	990

FLANGE SIZE



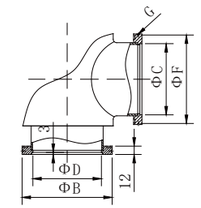
KF flange

KF flange				
DN	16	25	40	50
B	30	40	55	75
C	17.2	26.2	41.2	52.2
D	16	25	40	50



LF flange

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



GB-LP flange

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

OIL / VACUUM FLANGE AND FITTING

VACUUM PUMP OIL

BSO-46 is used for Roots vacuum pumps;
BSO-55/68 is used for two-stage oil rotary vane vacuum pumps;
BSO-100 is used for single-stage oil rotary vane vacuum pumps.

BSO46

BSO55

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		BSF6	BSF10	BSF16B	BSF30B	BSF120B
Filter Model	L	6	10	16	30	4*100
Maximum Processing Flow	m^3/h (L/s)	21.6 (6)	36 (10)	57.6 (16)	108 (30)	1600 (400)
Air Inlet		KF25	KF25	KF40	KF40	VF50
Exhaust Vent		KF25	KF25	KF40	KF40	∅ 50
Applicable Pump		DRV3/5	DRV10/16	DRV24 DRV30/40(underload)	DRV30/40(high load) DRV60/90	DRV175 DRV275
Weight (Flow at atmospheric pressure)	kg	0.32	0.98	1.5	2.1	30

VACUUM FLANGE AND FITTING

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

MEMORANDUM

OIL / VACUUM FLANGE AND FITTING