



NINGBO BAOSI ENERGY EQUIPMENT CO., LTD.

# 2019 PRODUCT CATALOGUE

# **VACUUM PUMP**



#### NINGBO BAOSI ENERGY EQUIPMENT CO., LTD.

ADD: NO.55 Juchao Rd, Jiangkou Subdistrict, Fenghua District, Ningbo, Zhejiang.

TEL: +86-574-88662932 FAX: +86-574-88569596

E-MAIL: bsvacsdexp@cnbaosi.com / dragonsyy@cnbaosi.com

www.baosivacuum.com / www.cnbaosi.com

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



# 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.

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OIL ROTARY VANE VACUUM PUMP	07-12	ROOTS VACUUM PUMP	13-16
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# **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 high-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.

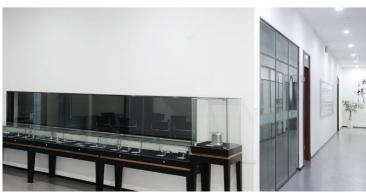
The company takes Learn, Harmony, Perseverance and Profession for enterprise culture, and advocates Maitreya culture, promote the spirit of Maitreya.

#### **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.









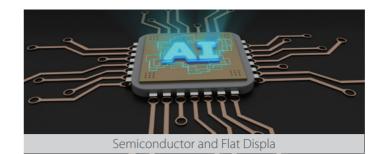


# **INDUSTRY INVOLVED**

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









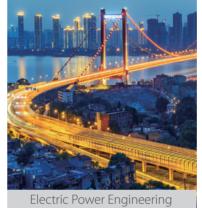






























**CUSTOMER FIRST EXCELLENT SERVICE DEVELOP TOGETHER WITH CUSTOMERS** 

ONE PHONE CALL EXCELLENT SERVICE 400 1006 555







Pharmacy



BSC SE NE SE (S BSC BRRGG

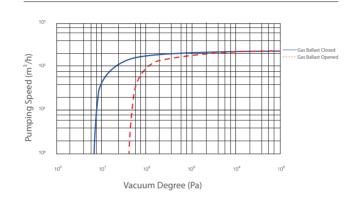
# **SINGLE STAGE ROTARY VANE VACUUM PUMP**



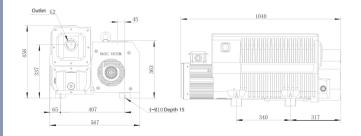
### **FEATURES**

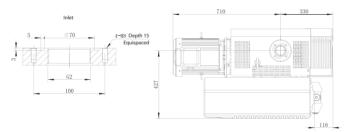
- The use of non-spring rotary vane to achieve low noise, low vibration and long service life.
- Built-in oil check valve is used to avoid the oil return phenomenon.
- Built-in forced fed oil pump is used to ensure the long-term continous operation of the pump at atmospheric pressure.
- The use of air 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**

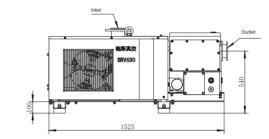
MODEL	SRV300	50Hz		60Hz
Nominal Pumping Speed	m³/h	280		340
Actual Pumping Speed	m³/h	240		290
Ultimate Pressure	Pa		≤ 8	
Ultimate Pressure (With Gas Ballast)	Pa		200	
Motor Power	kW		5.5	
Motor Rated Speed	rpm	1450		1750
Oil Filling (Min / Max)	-		8/10	
Inlet	-		G2	
Outlet	-		G2	

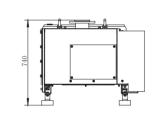
## **SRV630 TECHNICAL PARAMETER**

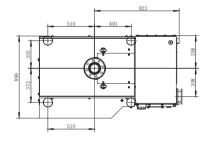
MODEL		SRV630	50Hz		60Hz
Actual Pumping Speed-Pum	ping Speed	m³/h	630		755
	Without Gas Ballast	Pa		≤ 8	
Ultimate Pressure	One Gas Ballast	Pa		≤ 70	
	Two Gas Ballasts	Pa		≤ 200	
Allowable Pressure of Water	One Gas Ballast	Pa	4000		5000
Vapor-Water Vapor Tolerance	Two Gas Ballasts	Pa	6000		7000
Allowable 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	
Motor Speed		rpm		1460	
Protection Class		-		IP55	
Power Consumption at Ultimat	e Pressure (without gas ballast)	kW		6.4	
Power Consumption at 100r	nbar Inlet	kW		12.5	
Pump Rated Speed		rpm	820		1000
W. t. L.	Without Oil	kg		675	
Weight	Oil	kg		695	
Oil Filling (Min / Max)		L		25/27	
Inlet		-		DN100ISO-K	
Exhaust	Exhaust		See In	stallation Dimensio	ons
Exhaust Thermal Protection	Switch	-	Have		-

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

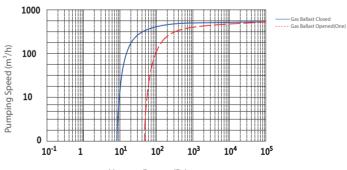
# **INSTALLATION DIAGRAM**







## **PUMP RATE CURVE**



BSC SE NE SE (S

# TWO STAGE ROTARY VANE VACUUM PUMP



## **TECHNICAL PARAMETER**

MODEL			DRV3	DRV5	DRV10	DRV16		
Dumning Data	50Hz	m³/h (L/min)	3.6	5.4	9.9	14.4		
Pumping Rate	60Hz	m³/h (L/min)	4.3	6.5	12	17.4		
Ultimate Pressure	Gas Ballast Closed	Pa		5X	10 <sup>-1</sup>			
	Gas Ballast Opened	Pa	5					
	380V (3 Phase)	kW	0.4/4.01)					
Motor Power	220V (Single Phase)	kW		0.4 (4 Phase)		0.55(4 Phase)		
Oil Filling		L	0.7	0.7	1.1	1.2		
Inlet		KF		KF	-25			
Outlet		KF		KF	-25			
Weight		kg	22.5	22.5	25	27		

MODEL			BSV24	BSV30	BSV40	BSV60	BSV90
Dunania a Data	50Hz	m³/h (L/min)	20 (336)	30 (500)	40 (667)	60 (1000)	90 (1500)
Pumping Rate	60Hz	m³/h (L/min)	24 (403)	36 (600)	48 (800)	72 (1200)	108 (1800)
Ultimate Pressure	Gas Ballast Closed	Pa			5X10 <sup>-1</sup>		
oitimate Pressure	Gas Ballast Opened	Pa	5.0		2	2.0	
Motor Power (4P)		kW	0.75	1.1	1.5	2.2	3.7
Voltage	3 Phase	V			380, 400		
Oil Filling		L	0.75~1.5	1.2	~2.8	2.5	~4.2
Inlet		KF	25		40		
Outlet		KF	25		40		
Ambient Temp.		$^{\circ}$			5~40		
Weight		kg	32	63	65	87	101

MODEL			BSV175	BSV275
Dumping Data	50Hz	m³/h	160	255
Pumping Rate	60Hz	m³/h	196	306
Motor Rotational Speed	50Hz	r/min	1440	1440
viotor Rotational Speed	60Hz	r/min	1720	1720
Motor Power	3 Phase /4 Pole	kW	5.5	7.5
I He' D	Gas Ballast Closed	Pa	5X10 <sup>-1</sup>	5X10 <sup>-1</sup>
Ultimate Pressure	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
Oil Filling	Min	L	20	23
Cooling Water Requirement	Water Temp 20°C	L/h	80	120
Weight	With Motor	kg	230	255

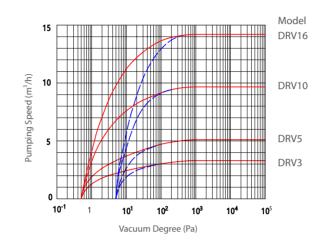
- The value of 'ultimate pressure' in the sheet is measured by Pirani gauge when the Baosi special pump oil is used, and the value should be 5X10<sup>-2</sup>, if the Mcleod gauge be used.

### **PUMP RATE CURVE**

#### DRV3[5 10 16]

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

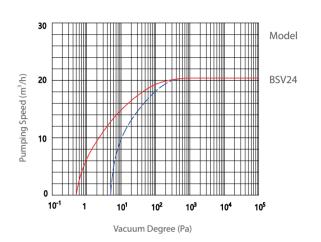
——Gas Ballast Closed ---- Gas Ballast Opened



#### BSV24

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

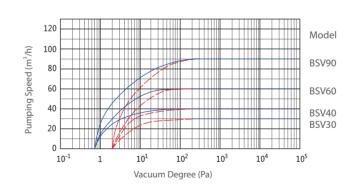
——Gas Ballast Closed ---- Gas Ballast Opened



#### BSV30[40 60 90]

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

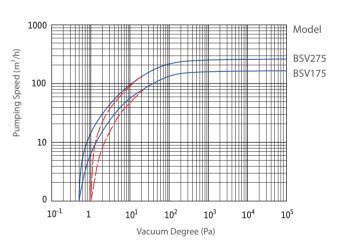
----Gas Ballast Closed ----- Gas Ballast Opened



#### BSV175[275]

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

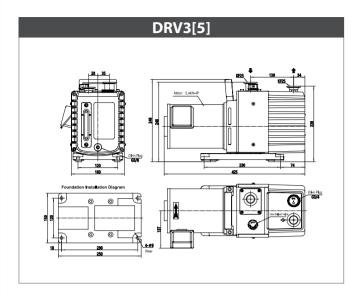
-----Gas Ballast Closed ----- Gas Ballast Opened

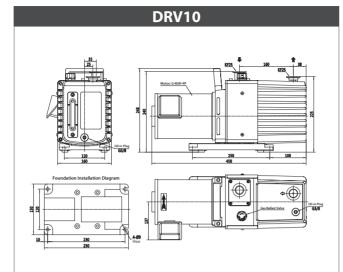


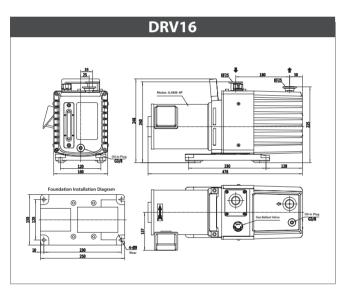
• Therefore, the Baosi special pump oil is recommended to guarantee the pump performance.

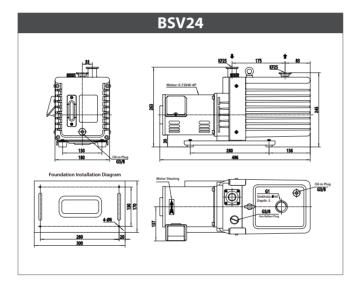


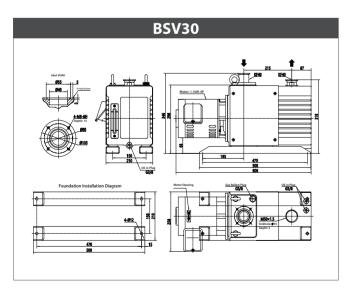
# **INSTALLATION DIAGRAM**

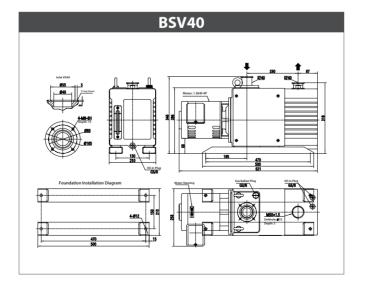




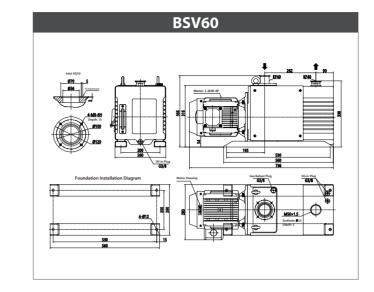


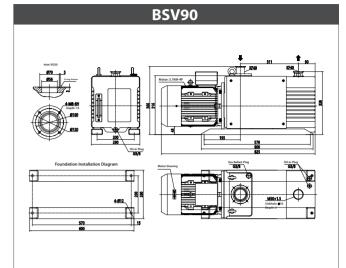


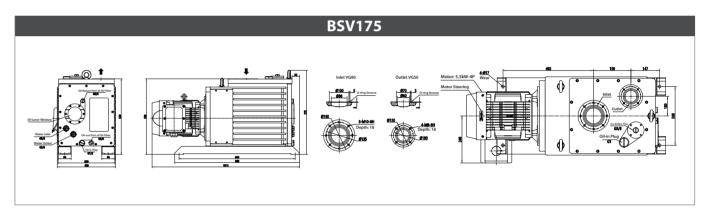


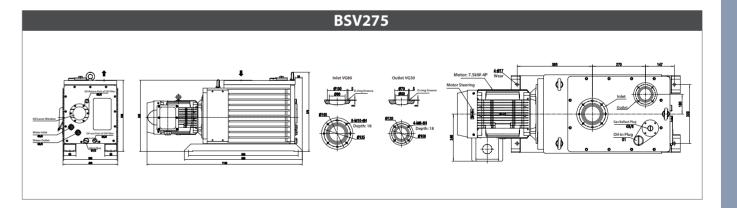


# **INSTALLATION DIAGRAM**











OIL ROTARY VANE VACUUM PUMP

# **ROOTS VACUUM PUMP**



### **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**

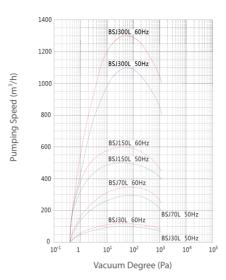
MODEL			BSJ30L	BSJ70L	BSJ150L	BSJ300L	BSJ600L
D Data	50Hz	m³/h (L/min)	100 (1667)	280 (4670)	500 (8330)	1000 (16667)	2000 (33330)
Pumping Rate	60Hz	m³/h (L/min)	120 (2000)	330 (5500)	600 (10000)	1200 (20000)	2400 (40000)
Max Intake Pressure	50Hz	Pa	1.2>	<10 <sup>3</sup>	1.3X	10 <sup>3</sup>	8.0X10 <sup>2</sup>
(continuous operation )	60Hz	Pa	9.3>	<10 <sup>2</sup>	1.1X	10 <sup>3</sup>	6.7X10 <sup>2</sup>
Max allowed	50Hz	Pa	4.0>	<10 <sup>3</sup>	7.3X	10 <sup>3</sup>	5.6X10 <sup>3</sup>
differential pessure	60Hz	Pa	3.3>	<10 <sup>3</sup>	6.0X	10 <sup>3</sup>	4.7X10 <sup>3</sup>
Ultimate Pressure		Pa			4.0X10 <sup>-2</sup>		
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	L/min	-	2	2	3	3
Flow Rate	Differential Pressure	MPa	-		0.1	1	
	Water Temp.	$^{\circ}$	-		5~3	30	
Inlet		-	VG50	VG80	VG80	VG100	VG200
Outlet		-	VF50	VF80	VF80	VF80	VF200
Ambient Temp.		$^{\circ}$			5~40		
Weight		kg	30	51	80	115	227

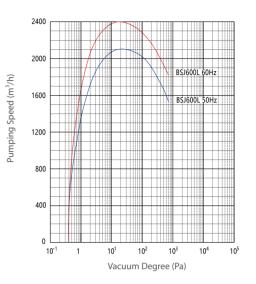
• The value of 'ultimate pressure' in the sheet is measured by Pirani gauge when the Baosi special pump oil is used, and the value should be 4X10<sup>-3</sup>, if the Mcleod gauge is used.

#### **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	
Dumping Pata	50Hz	m³/h	2590	4140	
Pumping Rate	60Hz	m³/h	3110	4985	
Max Intake Pressure	50Hz	Pa		1.0×10 <sup>5</sup>	
(continuous operation )	60Hz	Pa		1.0×10 <sup>5</sup>	
Max allowed differential pessure	50Hz	Pa	8.0×10 <sup>3</sup>	6.0×10 <sup>3</sup>	
	60Hz	Pa	6.7×10 <sup>3</sup>	5.0×10 <sup>3</sup>	
Ultimate Pressure		Pa		0.4	
Motor Power (2P)	Three Phase	kW		11	
Lubricating Oil Specification		-		BSO-46	
Gear Cover		L		3.5	
Hydraulic Drive		L		6.5	
Shaft Seal Reservoir		L		1.5	
	Flow	L/min		6	
Flow Rate	Differential Pressure	MPa		0.2~0.6	
	Water Temp.	${\mathbb C}$		5~35	
Weight		kg	350	420	
Inlet		-	ISO160	ISO250	
Outlet		-		ISO100	

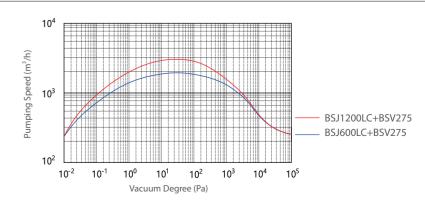
- Depending on the performance of the rough pump, the data in the table is the data used in combination with the standard rough pump.
- The ultimate pressure is a value measured with a Pirani vacuum gauge, and is 4 x 10<sup>-2</sup> Pa as measured by a Mcleod vacuum gauge.
- The cooling water inlet temperature 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

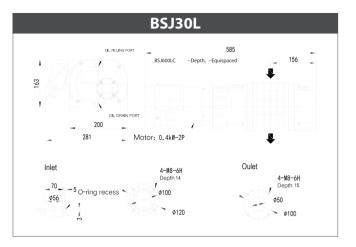
Vacuum pump oil: special oil for BAOSI vacuum pump

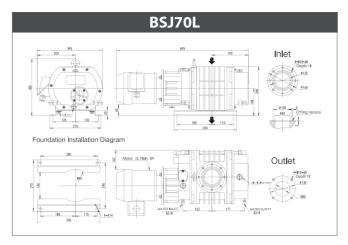


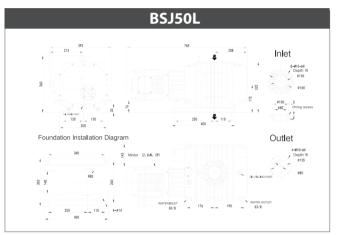


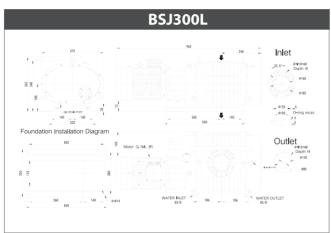


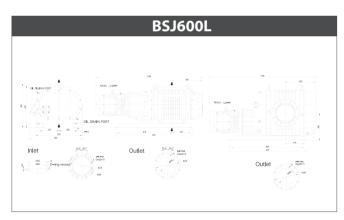
## **INSTALLATION DIAGRAM**

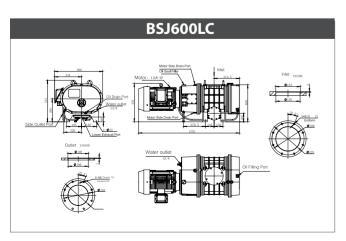


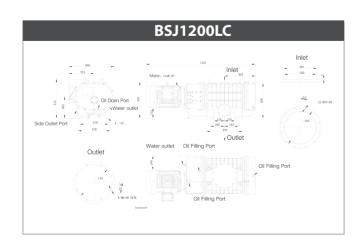












## **VACUUM PUMP SYSTEM**



# **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

		MODEL	JZ70A JZ70B	JZ150C			
			JZ70C		JZ300H		
				JZ150D			
Parameter			JZ70D				
Jltimate Pressure	Pa			4X10 <sup>-2</sup>			
	Roots Pump		BSJ70L	BSJ150L	BSJ300L		
			BSV30	BSV60	BSV275		
System	Oil Rotary		BSV40	BSV60	BSV275		
	0.1.101.0.1		BSV60	BSV90	BSV275		
			BSV90	BSV90	BSV275		
Motor (kW)	Roots pump (2P	P)	0.75	2.2	3.7		
			1.1	2.2	7.5		
	Oil Rotary Pump	5(4P)	1.5	2.2	7.5		
	Oli Notal y Pullip	J(4F)	2.2	3.7	7.5		
			3.7	3.7	7.5		
	Character of all acco		0.8	1.6	2		
	Standard oil of F	Roots pump	Standard oil of Roots Pump BSO46				
Oil Filling (L)			1.2~2.8	2.5~4.2	23~28		
	Standard oil of 0	Oil Rotany pump	2.5~4.2	2.5~4.2	23~28		
			Standard oil of Roots Pump BSO68				
		Roots Pump	-	Water Cooling	Water Cooling		
	Cooling Way	Oil Rotary	-	-	Water Cooling		
Cooling Water	Water Pressure	fferential Pressure	≪ 0.3 MPa(Gauge Pressure)/0.1MPa				
	Water Temp. (℃			5~30			
	Water Yield (L/m		2	4	6		
Air Intake (OD)			G80	VG100			
Air Outlet (OD)			K	KF40			
Options			1 Electric Cabinet: 2 Vacuu	m Gauge; 3 Suction Port Flange; 4 Filter	: 5 Switch Of Cooling Water		





## **SCREW DRY VACUUM PUMP**





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.

#### Drving

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.

#### **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.

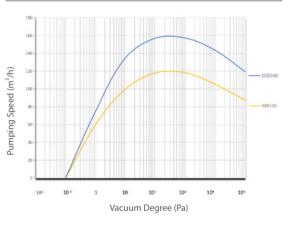
		Purgin	ng mode	Accessories		
Application	Low loading Sealed purging	Medium loading Sealed purging+ ilution purging+ inlet purging when starting and stopping	High loading Medium loading +High flow purging or flux rinse when stopping	Inlet filter Metal net	Silencer Washable	
Annealing	*					
CVI CVD		*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

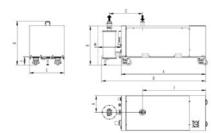
#### **GSD SERIES PUMP**

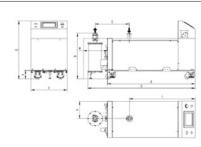
MODEL			GSD120B	GSD160B	GSD160D	
Speed (without	purging)	m³/h	120	160	160	
Ultimate pressure (without purging)		Pa	≤ 0.5	≤ 0.5	≤ 0.5	
Motor	Motor power	kW	3.7	5.5	5.5	
MOTOL	Voltage (3 phase)	V		380/400		
Interface	Inlet	-		KF40		
Interrace	Outlet	-		KF40		
	Pressure	MPa		0.1~0.4		
	Flow	L/min		≥ 4		
Cooling water	Temprature	$^{\circ}$		5~30		
	Interface	-		G3/8		
	Pressure	MPa		0.2~0.6		
N <sub>2</sub> Purging	Flow	L/min		12~50		
	Interface	-		G1/4		
Max Allowed O	utlet Pressure	MPa	0.14			
Niose (with silencer and check valve)		dB	≤ 70			
Water Temp.		$^{\circ}$	5~40 °C / Below 90% RH			
Weight		kg	~273	~273	~378	

#### **PUMPING RATE CURVE**



#### **INSTALLATION DIAGRAM**





MODEL	Α	В	C	D	E	F	G	Н		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

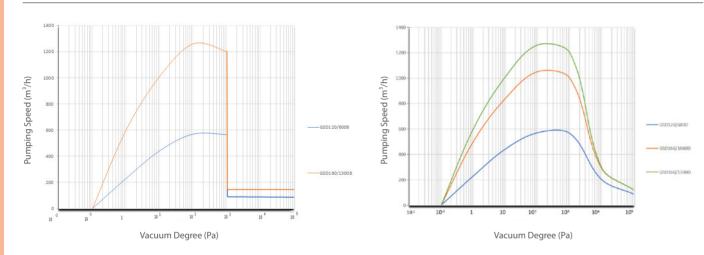




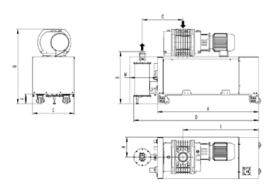
# **GSD SERIES PUMP SYSTEM**

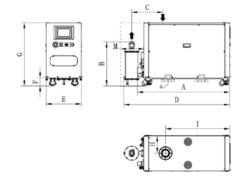
MODEL			GSD120/600B	GSD160/1300B	GSD120/600D	GSD160/1080D	GSD160/1300D
Speed (without pr	urging)	m³/h	600	1300	600	1080	1300
Ultimate Pressure	(without purging)	Pa	≤ 0.1	≤ 0.1	≤ 0.1	≤ 0.1	≤ 0.1
Motor	Motor power	kW	2.2+3.7	3.7+5.5	2.2+3.7	3.7+5.5	3.7+5.5
MOTOL	Voltage (3 phase)	V			380/400		
Interface	Inlet	-	VG80	VG100	VG80	VG100	VG100
interiace	Outlet	-			KF40		
	Pressure	MPa			0.1~0.4		
Cooling Water	Flow	L/min			≥ 4		
Cooling Water	Temprature	$^{\circ}$ C			5~30		
	Interface	-			G3/8		
	Pressure	MPa			0.2~0.6		
N <sub>2</sub> Purging	Flow	L/min			12~50		
	Interface	-			G1/4		
Max Allowed Outl	Max Allowed Outlet Pressure				0.14		
Niose (with silence	Niose (with silencer and check valve)		≤ 70	≤ 72	≤ 68	≤ 70	≤ 70
Water Temp.	Vater Temp.			5	~40 °C / Below 90% RH		
Weight		kg	~378	~428	~378	~378	~378

# PUMPING RATE CURVE



# **GSD INSTALLATION DIAGRAM**





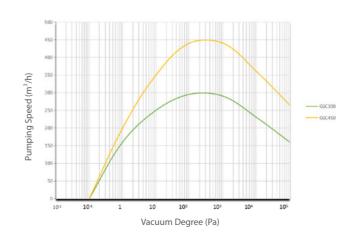
MODEL	Α	В	C	D	Е	F	G	Н		М	INLET	OUTLET
GSD120/600B	1100	570	430	1350	450	100	825	216	820	300	VG80	KF40
GSD160/1300B	1100	570	430	1350	450	100	825	216	820	300	VG100	KF40
GSD120/600D	1100	570	430	1350	450	100	825	216	820	300	VG80	KF40
GSD160/1080D	1100	570	430	1350	450	100	825	216	820	300	VG100	KF40
GSD160/1300D	1100	570	430	1350	450	100	825	216	820	300	VG100	KF40

# **GSC SERIES PUMP**

			******	******
MODEL			GSC300B	GSC450B
Speed (without pu	rging)	m³/h	300	450
Ultimate Pressure (	(without purging)	Pa	≤ 0.5	≤ 0.5
Motor	Motor power	kW	5.5	11
MOTOL	Voltage (3 phases)	V		380/400
latarfa as	Inlet	-	KF50	ISO100
Interface	Outlet	-	KF40	KF50
1	Pressure	MPa	0.1~0.4	0.1~0.3
Caaliaa Mataa	Flow	L/min	≥ 4	≥ 6
Cooling Water	Temprature	$^{\circ}$		5~30
	Interface	-		G3/8
	Pressure	MPa		0.2~0.6
N <sub>2</sub> Purging	Flow	L/min	12~50	23~90
	Interface	-		G1/4
Max Allowed Outle	et Pressure	MPa		0.14
Niose (with silencer and check valve)		dB	≤ 70	≤ 73
Water Temp.		$^{\circ}$	5~40	°C / Below 90% RH
Weight		kg	~273	~530

MODEL			GSC300D	GSC450D
Speed (without pure	ging)	m³/h	300	450
Ultimate Pressure (v	vithout purging)	Pa	≤ 0.5	≤ 0.5
Motor	Motor power	kW	5.5	11
MOTOL	Voltage (3 phase)	V		380/400
Interface	Inlet	-	KF50	ISO100
interrace	Outlet	-	KF40	KF50
	Interface	-		G3/8
	Pressure	MPa	0.1~0.4	0.1~0.3
Caaliaa Watau	Flow	L/min	≥ 4	≥ 6
Cooling Water	Temprature	$^{\circ}$		5~30
	Interface	-		G1/4
N. Donning	Pressure	MPa		0.2~0.6
N <sub>2</sub> Purging	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.		$^{\circ}$	5~40°	C / Below 90% RH
Weight		kg	~283	~540

# PUMPING RATE CURVE

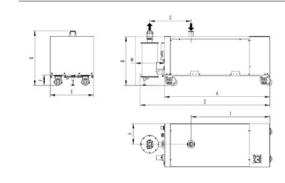


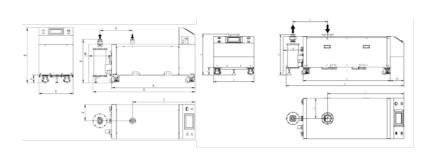


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#### 10

#### **GSD INSTALLATION DIAGRAM**



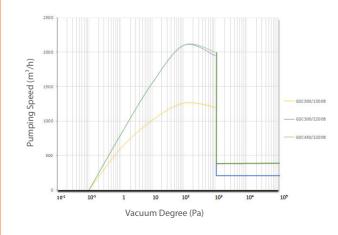


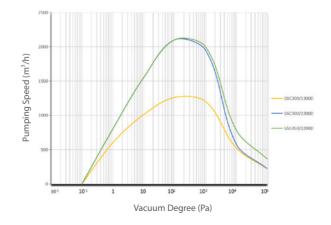
MODEL	Α	В	C	D	Е	F	G	Н		М	INLET	OUTLET
GSC300B	1100	570	430	1350	450	100	570	216	820	300	KF50	KF40
GSC450B	1300	600	519	1558	600	11	605	300	940	300	ISO100	KF50
GSC300D	1130	560	380	1360	450	90	650	220	820	300	KF50	KF40
GSC450D	1300	600	519	1558	600	115	605	300	940	300	ISO100	KF50

### **GSC SERIES PUMP SYSTEM**

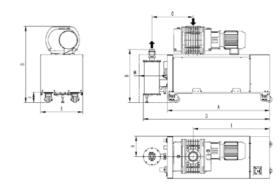
MODEL			GSC300/1300B	GSC450/2200B	GSC300/1300D	GSC300/2200D	GSC450/2200D
Speed (without p	urging)	m³/h	1300	2200	1300	2200	2200
Ultimate Pressure	(without purging)	Pa	≤ 0.1	≤ 0.1	≤ 0.1	≤ 0.1	≤ 0.1
Motor	Motor power	kW	3.7+5.5	7.5+11	3.7+5.5	7.5+5.5	7.5+11
MOTOL	Voltage (3 phase)	V			380/400		
Interface	Inlet	-	VG100	VG200	VG100	VG200	VG200
interrace	Outlet	-	KF40	KF50	KF40	KF40	KF50
	Pressure	MPa	0.1~0.4	0.1~0.3	0.1~0.4	0.1~0.4	0.1~0.3
Cooling Water	Flow	L/min	≥ 4	≥ 6	≥ 4	≥ 4	≥ 6
Cooling water	Temprature	$^{\circ}$			5~30		
	Interface	-			G3/8		
	Pressure	MPa			0.2~0.6		
N <sub>2</sub> Purging	Flow	L/min	12~50	23-90	12~50	12~50	23-90
	Interface	-			G1/4		
Max Allowed Out	let Pressure	MPa			0.14		
Niose (with silencer and check valve)		dB	≤ 72	≤ 75	≤ 70	≤ 72	≤ 75
Water Temp.	Water Temp.			5	~40 °C / Below 90% RH		
Weight		kg	~428	~820	~413	~550	~850

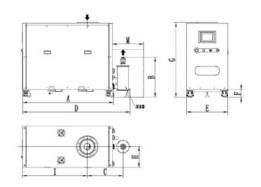
### **PUMPING RATE CURVE**





### **GSC INSTALLATION DIAGRAM**

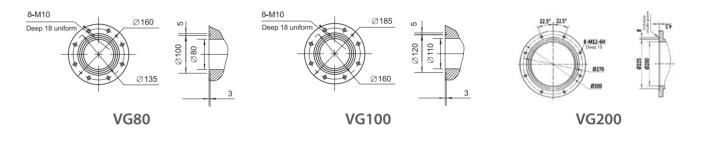




MODEL	Α	В	С	D	Е	F	G	Н	I	М	INLET	OUTLET
GSC300/1300B	1100	570	430	1350	450	100	825	216	820	300	VG100	KF40
GSC450/2200B	1340	580	520	1580	600	115	1100	300	940	450	VG200	KF50
GSC300/1300D	1100	570	430	1350	450	100	825	216	820	300	VG100	KF40
GSC300/2200D	1340	580	520	1580	600	115	1100	300	940	450	VG200	KF50
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.



### **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 VACUUM PUMP**





GSP3/GSP5

GVD8

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 design and manufacture. With

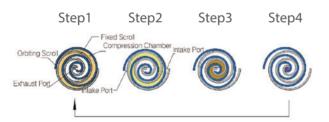
benefits of low consumption, long working life, high reliability, and low noise, It has incomparable advantages in the application of clean process and has been popularly used in the market. GVD, GSP series scroll dry pumps are scroll dry pumps with excellent performance and obvious price competitiveness, 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



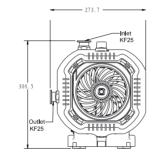
### **TECHNICAL PARAMENT**

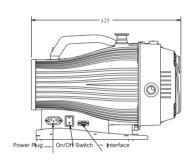
MODEL		GSP3	GSP5
Nominal Rotation Speed	rpm	1800	1800
Displacement	m³h <sup>-1</sup>	12	18
Ultimate Vacuum	mbar	0.008	0.05
Motor Power	W	400	400
Voltage Input	V	1- phase 100-240	1- phase100-240
Dimensions	mm	430×255×290 (L×W×H)	430×255×290 (L×W×H)
Noise Level	dB(A)	54	54
Inlet Flange	-	NW 25	NW 25
Exhaust Flange	-	NW 25	NW 25
Max Water Vapour Pumping Rate	gh <sup>-1</sup>	100	210
Leak Tightness	mbar·l/s	< 1×10 <sup>-6</sup>	< 1×10 <sup>-6</sup>
Weight	kg	28	29
Cooling System	-	Air-cooled	Air-cooled
Operating Temperature	$^{\circ}$	10 to 40	10 to 40

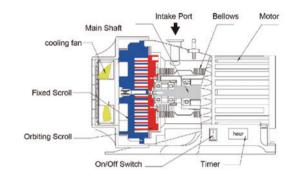
#### **TECHNICAL PARAMENT**

MODEL		GVD8
Nominal Rotation Speed	rpm	1750
Displacement	m³h <sup>-1</sup>	30
Ultimate Vacuum	mbar	0.008
Motor Power	W	750
Voltage Input	V	1- phase100-240 / 3- phase200-460
Dimensions	mm	491x305x401 ( L x W x H)
Noise Level	dB(A)	63
Inlet Flange	-	KF40
Exhaust Flange	-	KF25
Max Water Vapour Pumping Rate	gh <sup>-1</sup>	60
Leak Tightness	mbar·l/s	< 1x10 <sup>-4</sup>
Weight	kg	44
Cooling System	-	Air-cooled
Operating Temperature	°C	5 to 40

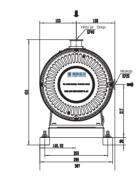
## **GSP3/5 INSTALLATION DIAGRAM**

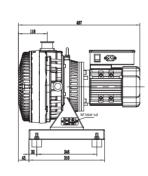


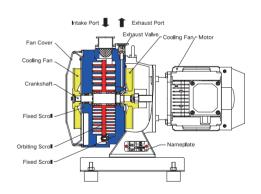




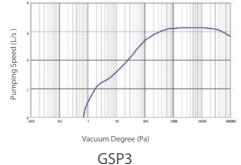
### **GVD8 INSTALLATION DIAGRAM**

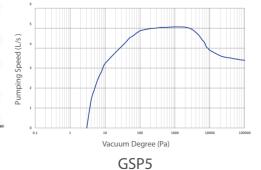


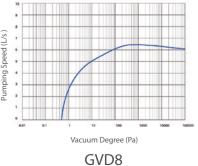




### **PUMPING RATE CURVE**







BSC M M R R BSC B M R R R

2

# **HYBRID MOLECULAR PUMP**



The hybrid molecular pump is a kind of mechanical vacuum pump which is obtained by a high-speed rotating rotor carrying gas molecules to obtain an ultra-high vacuum. It is a combination of a turbo molecular pump and a disc-type traction pump, which

simultaneously has a large pumping speed and compression ratio for turbomolecular pump when it has molecular flow; as well as high pumping speed and compression ratio for the traction pump when it with high pressure. Due to these characteristics, the application range of molecular pumps has been expanded. Widely used in various fields of vacuum technology such as photovoltaic, lighting, aerospace, semiconductor, energy, military, laser, home appliances, materials, automotive, scientific

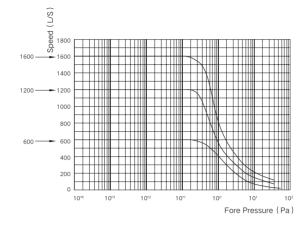
#### **FEATURES**

The hybrid molecular pump has no selectivity and no memory effect on the pumped gas. Because of high compression ratio of the gas with large molecular, the pump can obtain clean high vacuum without the need of cold trap. and oil trap.

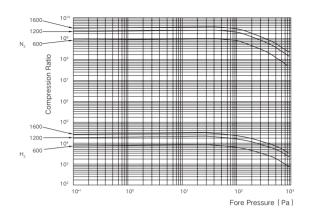
# TECHNICAL PARAMETER

MODEL		GFF600 (F)	GFF1200 (F)	GFF1600 (F)		
Inlet Flange	_	LF160 CF150	LF200 CF200	LF250 CF250		
Outlet Flange	_	KF40	KF40	KF40		
Pumping Speed	L/s	600	1200	600		
Compression Ratio N <sub>2</sub> /H <sub>2</sub>	_	$1\times10^{9}/8\times10^{3}(1\times10^{9}/1\times10^{4})$	1×10 <sup>9</sup> /1×10 <sup>4</sup>	1×10 <sup>9</sup> /1×10 <sup>4</sup>		
Ultimate Pressure	Pa	5×10 <sup>-7</sup> 8×10 <sup>-8</sup>	5×10 <sup>-7</sup> 8×10 <sup>-8</sup>	5×10 <sup>-7</sup> 8×10 <sup>-8</sup>		
Rotation Speed	rpm	24000	24000	21000		
Run-Up Time	min	≤ 4.5 ( ≤ 5)	≤ 5	≤ 6		
Vibration	μm	≤ 0.1	≤ 0.1	≤ 0.15		
Forevacumm Pump Speed	L/s	4-8	8-15	15		
Cooling Water Temperature	$^{\circ}$	$\leq$ 20 ( Ambient temperature<37 $^{\circ}$ C )	$\leq$ 20 ( Ambient temperature<37 $^{\circ}$ C )	$\leq$ 20 ( Ambient temperature<37 $^{\circ}$ C )		
Pump Temperature	$^{\circ}$	≤ 120	≤ 120	≤ 120		
Cooling Water Flow	L/min	1	1	1		
Heater Power	W	< 550	< 600	< 700		
Heater Voltage	V	AC220	AC220	AC220		
Installation Direction	_	Vertical±5°	Vertical±5°	Vertical±5°		
Weight	kg	~ 29	~ 34 ( ~ 35 )	~ 39		

### **PUMPING RATE CURVE**

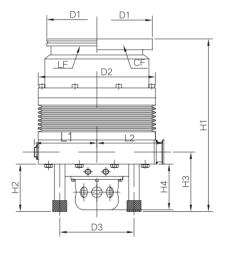


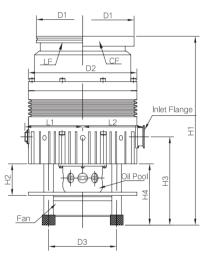
GFF Pumping Speed Curve For Air



GFF Compression Ratio Curve For N<sub>2</sub>, H<sub>2</sub>

## **INSTALLATION DIAGRAM**





### **GFF INSTALLATION DIAGRAM**

MODEL	GFF60	00 (F)	GFF12	200 (F)	GFF1600 (F)		
Inlet Flange	LF160	CF150	LF200	CF200	LF250	CF250	
$D_1$	Ф180	Ф202	Ф180	Ф202	Ф180	Ф202	
$D_2$	Ф236	Ф236	Ф236	Ф236	Ф236	Ф236	
$D_3$	□ 45.7	□ 145.7	□ 45.7	□ 145.7	□ 45.7	□ 145.7	
L <sub>1</sub>	128	128	128	128	128	128	
L <sub>2</sub>	137	137	137	137	137	137	
H <sub>1</sub>	395.5 (467)	395.5 (467)	395.5 (467)	395.5 (467)	395.5 (467)	395.5 (467)	
H <sub>2</sub>	135.5 ( 178.5 )	108 (70)	135.5 ( 178.5 )	108 (70)	135.5 ( 178.5 )	108 (70)	
H <sub>3</sub>	104 (151)	CF150	104 (151)	CF150	104 (151)	CF150	
H <sub>4</sub>	104 (151)	CF150	104 ( 151 )	CF150	104 ( 151 )	CF150	
Pump Feet Screw Hole	104 (151)	CF150	104 (151)	CF150	104 (151)	CF150	





BSC SE NE SE (c)

# **GREASE-LUBRICATED MOLECULAR PUMP**



The GFG-Z series grease-lubricated molecular pump adopts the first variable-section leaf tooth in China. The bearing adopts greaselubricated ceramic precision bearing, which

realizes the installation of the pump at any angle and clean oil-free high vacuum environment with higher reliability. It widely used in various fields of vacuum technology

such as photovoltaic, lighting, aerospace, semiconductor, energy, military, laser, home appliances, materials, automotive, scientific

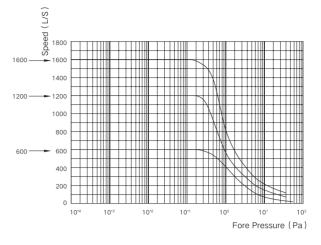
#### **FEATURES**

Because of high compression ratio of the gas with large molecular, the pump can obtain clean high vacuum without the need of cold trap. and oil trap. Grease-lubricated ceramic precision bearing for installation at any angle of the pump.

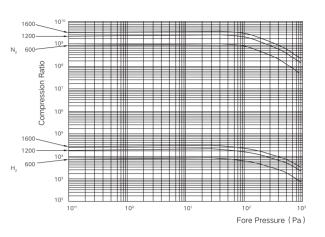
### TECHNICAL PARAMETER

MODEL		GFG3	00Z	GFG	650Z	GFG1	1300Z	GFG2	000Z	
Inlet Flange	_	LF100	CF100	LF160	CF150	LF200	CF200	LF250	CF250	
Outlet Flange	_	KF2	25	K	F40	KI	KF40		KF50	
Pumping Speed	L/s	30	00	6	50	1	300	2000		
Compression Ratio N <sub>2/</sub> H <sub>2</sub>	_	1×10 <sup>8/</sup>	1×10 <sup>3</sup>	1×10°	<sup>9/</sup> 1×10 <sup>4</sup>	1×10°	1×10 <sup>4</sup>	1×10 <sup>9/</sup> 1×10 <sup>4</sup>		
Ultimate Pressure	Pa	8×10 <sup>-7</sup>	3×10-7	3×10 <sup>-6</sup>	2×10 <sup>-7</sup>	5×10-7	8×10 <sup>-8</sup>	5×10 <sup>-7</sup>	8×10 <sup>-8</sup>	
Rotation Speed	rpm	3300	00	24	000	24	24000		24000	
Vibration	μm	_		≤	≤ 0.1		≤ 0.1		≤ 0.1	
Run-Up Tim	min	€ 4	4	<b>\leq</b>	≤ 5		5	€	6	
Bearing	_				Grease-lubricated c		J			
Forevacumm Pump Speed	L/s	2		4	-8	8-	8-15		5	
Cooling Type	_	Air-co	oled	Air-c	ooled		cooled ooled)	Water-cooled ( Air-cooled )		
Cooling Water Temperature	$^{\circ}$	_		<	25	€	25	≤ 1	25	
Ambient Temperature	$^{\circ}$	< 3	88	<	40	<	40	<	40	
Cooling Water Flow	L/min	_	_		1		1			
Installation Direction	_				Any ar		ingle			
Weight	kg	~ 1	11	~	26	~ 27		~ 30		

### **PUMPING RATE CURVE**

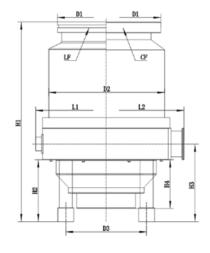


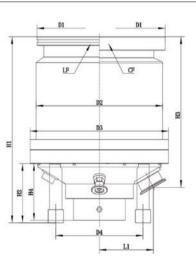




GFG-Z Compression Ratio Curve For N<sub>2</sub>, H<sub>2</sub>

### **INSTALLATION DIAGRAM**





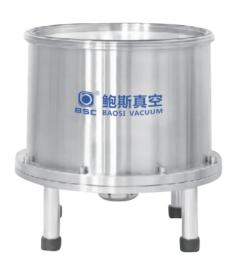
## GFG-650Z / GFG1300Z / GFG2000Z INSTALLATION DIAGRAM

MODEL	GFG6	50Z	GFG1	300Z	GFG2	.000Z
Inlet Flange	LF160	CF150	LF200	CF200	LF250	CF250
$D_1$	Ф180	Ф202	Ф240	Ф253	Ф290	Ф305
D <sub>2</sub>	Ф212	Ф216	Ф243	Ф243	Ф274	Ф274
$D_3$	149.2	149.2	Ф266	Ф245	Ф296	Ф296
$D_4$	130.3	130.3	167.6	167.6	184	184
L <sub>1</sub>	143.8	143.8	103.7	103.7	117	117
H <sub>1</sub>	350.6	348.6	338.8	338.8	313.3	318.3
H <sub>2</sub>	108	108	108	108	120	120
H <sub>3</sub>	135.5	135.5	274.5	274.5	244.2	250.5
H <sub>4</sub>	85	85	103.5	103.5	102.5	102.5

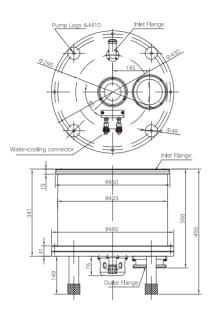




The impeller of the GFG3600 turbomolecular pump uses variable-section leaf tooth, which enhances blade strength, reduces rotor weight, shortens run-up time, reduces mechanical losses, and increases service life



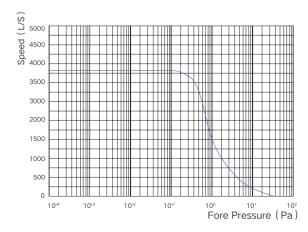
**TURBOMOLECULAR PUMP** 



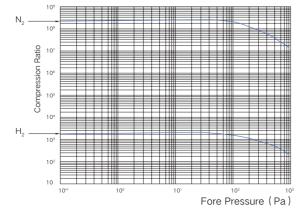
# TECHNICAL PARAMETER

MODEL		GFG3600
Inlet Flange		LF400
Outlet Flange	_	LF100
Pumping Speed	L/s	3600
Compression Ratio N <sub>2</sub> /H <sub>2</sub>	_	1×10 <sup>8</sup> /5×10 <sup>2</sup>
Ultimate Pressure	Pa	2×10 <sup>-6</sup>
Rotation Speed	rpm	12600
Run-Up Time	min	≤ 10
Vibration	μm	≤ 0.15
Forevacumm Pump Speed	L/s	30-70
Cooling Water Temperature	$^{\circ}$	≤ 25
Pump Temperature	$^{\circ}$	≤ 120
Cooling Water Flow	L/min	1
Installation Direction	_	Vertical±5°
Weight	kg	~ 100

#### **PUMPING RATE CURVE**



GFG-3600 Pumping Speed Curve For Air



GFG-3600 Compression Ratio Curve For N<sub>2</sub>, H<sub>2</sub>

# **B SERIES MOLECULAR PUMP DRIVE ELECTRONIC**





### **FEATURES**

- Safe, Stable and Speed Tracked: B series molecular pump drive electronic is high-speed programmable power devices based on international famous brand semiconductor devices. Its working state is stable, with strong overload capability and accurate operating data. With automatic tracking function (drive electronic aumomatically presses the front speed tracking acceleration after power failure and abnormal problem processing), brake function (stop the pump within set time), acceleration over-current, running over-current, decelration over-voltage, and protection fuction such as undervotalge, overheating, and overheating, to extend service life.
- Low temperature rise, Strong applicability: B series molecular pump drive electronic has built-in high-efficiency output transformer with long overload capability and very low temperature rise for long-term continuous operation.
- Easy to automate integrated control: B series molecular pump drive electronic has a complete set of external control interfaces, including single-piece start/ stop control, passive normally closed switch fault signal, passive normally open switch full-speed running signal, 0-10V frequency analog sinal output, 10V frequency sychronous pulse signal, 485 control and other functions. Convenient components for automated evacuation systems for a variety of vacuum equiment.

#### **TECHNICAL PARAMETER**

MODEL	B600	B1200	B1600	B3600
		800W ( Overload capability 1500W	)	800W ( Overload capability 1500W )
Output Power		Below 250W with normal running		Below 250W with normal running
		Below 500W with acceleration		Below 500W with acceleration
Output Voltage		0~55V		0~50V
Output Frequency		0 ( 10 ) — 400Hz		0 ( 10 ) — 225Hz
Cable Length	3m	、5m、10m、20m、25m( Un-recom	mended, install the drive electronic	nearby)
Acceleration Time	<	5min	< 6min	< 12min
Deceleration Time	<	8min	< 9min	< 17min
Input Voltage		Single phase/AC	180V-240V 、50-60Hz	
Working Condition		Ambient temperature	e 0~40, Humidity < 80%	

### B600/1200 B1600 B3600 INSTALLATION DIAGRAM

Front Panel	Width 480mm×Height 177mm (Thickness 2.5mm)	Min distance between front panel and cabinet front door	13mm
Rear Panel	Width 440mm×Height 170mm	Min distance between rear panel and cabinet	150mm
Вох	Depth 300mm×Width 440mm× Height 170mm	Min distance between box and cabinet	50mm

## B600/1200 \ B1600(2U)INSTALLATION DIAGRAM

Front Panel	Width 480mm × Height 88mm ( Thickness 2.5mm)	Min distance between front panel and cabinet front door	13mm
Rear Panel	Width 440mm × Height 170mm	Min distance between rear panel and cabinet	150mm
Вох	Depth 300mm × Width 438mm × Height 88mm	Min distance between box and cabinet	50mm



# **HI-VACUUM ANGLE VALVES**





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.

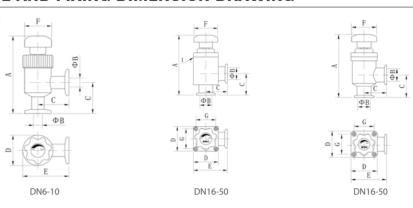
#### **APPLICATION**

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 Ran	nge	Pa		1×10 <sup>-6</sup>	~ 5×10 <sup>5</sup>		
Pressure	Opening Direction	Pa		1.2	×10 <sup>5</sup>		
Differential	Closure Direction	Pa		5>	(10 <sup>5</sup>		
Opening Pre	essure Differential	Pa		≤ 1.2×10 <sup>5</sup> Ar	y Orientation		
Leak Rate		Pa·L/s		≤ 1.3	×10 <sup>-7</sup>		
Switching C	ycles	_		1 Million	n Times		
Conductano	e	L/s	4.5	14	45	80	
Temperature	е	$^{\circ}$		€	120		
Opening/Clo	osure Time	S		Manual Ope	ration Time		
Position Ind	ication	_		Mechanica	l Indicator		
Installation	Position	_		Ar	ny		
Ambient Ter	mperature	°C		5~	40		

#### APPREARANCE AND FIXING DIMENSION DRAWING



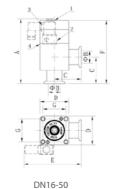
MODEL	DN		Dimension Table ( mm )							
WIODEL	DIN	Α	В	C	D	E	F	G		
GD-J6~10(B)	6~10	90.4	6~10	35	36	53	32	_		
GD-J16(B)	16	110	16	40	46	63	40	35		
GD-J25(B)	25	120	25	50	54	77	50	43		
GD-J40(B)	40	151	40	65	74	102	60	61		
GD-J50(B)	50	170	50	70	78	109	60	65		

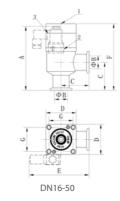
### **GDQ SERIES HV PNEUMATIC VALVE PARAMETER**

MODEL		GDQ-J16(B)	GDQ-J25(B)	GDQ-J40(B)	GDQ-J50(B)
DN	mm	16	25	40	50
Pressure Range	Pa		$1 \times 10^{-5} \sim 5 \times 10^{5}$ (1)	×10 <sup>-6</sup> ~ 5×10 <sup>5</sup> )	
Pressure Opening Direction	Pa		1.2×1	105	
Differential Closure Direction	Pa		5×10	O <sup>5</sup>	
Opening Pressure Differential	Pa		≤ 1.2×10 <sup>5</sup> Any	Orientation	
Leak Rate	Pa·L/s		≤ 1.3×	10 <sup>-7</sup>	
Switching Cycles	_		1 Million T	limes	
Conductance	L/s	4.5	14	45	80
Temperature	$^{\circ}$		≤ 12	0	
Power	_		A/C 220V 50Hz or	D/C 24V,3W,	
Opening/Closure Time	S		≤ 0.7	7	
Compressed Air	MPa		0.4~0.	7	
Position Indication	_		Passive Switch Signal + N	Mechanical Indicator	
Installation Position	_		Any		
Ambient Temperature	$^{\circ}$		5~40	)	

#### APPREARANCE AND FIXING DIMENSION DRAWING

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





MODEL	DN		D	imensio	on Table	( mm )		
MODEL	DIN	Α	В	C	D	Е	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



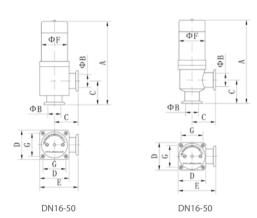


BSC B NE RR (F)

# 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 Rar	nge	Pa		1×10 <sup>-5</sup> ~1×10 <sup>5</sup>	(1×10 <sup>-6</sup> ~1×10 <sup>5</sup> )	
Pressure	Opening Direction	Pa		€	1×10 <sup>5</sup>	
Differential	Closure Direction	Pa		€	5×10⁵	
Differential (	Opening Pressure	Pa		≤ 1×10 <sup>5</sup> Ar	ny Orientation	
Leak Rate		Pa·L/s		≤ 1	3×10 <sup>-7</sup>	
Number Of F	First Maintenance Cycles	s —		200	000	
Valve Body E	Baking Temperature	$^{\circ}$		€	120	
Power Supp	ly	_		Ue: AC220V 50Hz Use	Range: 85% Ue ~110% Ue	
Starting / Wo	orking Power	_	600/0.7	800/1	1000/2	1400/3
On Or Off Tir	me	S		Open ≤ 0.2	/ Close ≤ 0.5	
Operating Fi	requency	_		€	300	
Valve Positio	on Indication	_		Live indication	LED + on signal	
Installation F	Position	_		, and the second se	Any	
Ambient Ter	mperature	°C		5~	-40	

## APPREARANCE AND FIXING DIMENSION DRAWING



MODEL	DN			Dimensi	on Table	( mm )		
MODEL	DIN	Α	В	C	D	Е	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

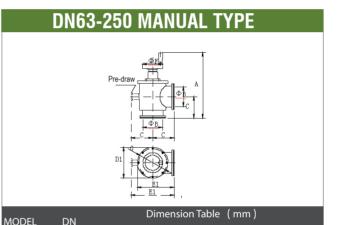
# **GD SERIES HV MANUAL VALVE PARAMETER**

MODEL			GD-J63(B)	GD-J80(B)	GD-J100(B)	GD-S160B	
DN		mm	63	80	100	150	
Pressure Range	e	Pa		1×10 <sup>-5</sup> ~3×10 <sup>5</sup>	(1×10 <sup>-6</sup> ~3×10 <sup>5</sup> )		
Pressure O	pening Direction	Pa	≤ 1.0×10 <sup>5</sup>				
Differential C	losure Direction	Pa		€	3×10 <sup>5</sup>		
Opening Press	ure Differential	Pa		≤ 1.0×10 <sup>5</sup> A	ny Orientation		
Leak Rate		Pa·L/s		≤ 1	3×10 <sup>-7</sup>		
Switching Cycl	es	_		800	000		
Conductance		L/s	160	200	440	1000	
Temperature		$^{\circ}$		€	120		
Opening/Closu	ure Time	S	Manual Operation Time				
Position Indica	tion	_	Mechanical Indicator				
Installation Pos	sition	_	Any				
Ambient Temp	erature	$^{\circ}$		5~	40		

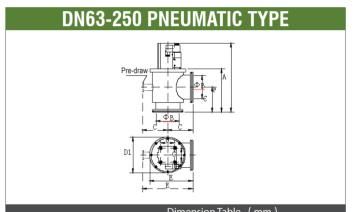
## **GDQ SERIES HV PNEUMATIC VALVE PARAMETER**

MODEL		GDQ-J63(B)	GDQ-J80(B)	GDQ-J100(B)	GDQ-J160(B)	GDQ-S200(B)	GDQ-S250(B)				
DN	mm	63	63 80 100 150 200								
Pressure Range	Pa		1×10 <sup>-5</sup> ~3×10 <sup>5</sup> (1×10 <sup>-6</sup> ~3×10 <sup>5</sup> )								
Pressure Opening Direction	Pa		≤1.0×10 <sup>5</sup>								
Differential Closure Direction	Pa			≤3	5×10⁵						
Opening Pressure Differential	Pa		≤ 1.0 × 10 <sup>5</sup> Any Orientation								
Leak Rate	Pa·L/s			≤ 1.3	3×10 <sup>-7</sup>						
Switching Cycles	_	1 Million Times									
Conductance	L/s	4.5	4.5 14 45 80 45 8								
Temperature	$^{\circ}$ C			≤	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	_			Magnet	ic Switch						
Installation Position	_			А	ny						
Ambient Temperature	$^{\circ}$ C			5~	~40						

## APPREARANCE AND FIXING DIMENSION

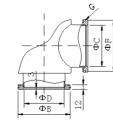


MODEL	DN		Dimension Table ( mm )							
WODEL	DN	Α	В	C	D	Е	F	G		
GD-J63B)	63	280	63	88	123	149.5	80	111	-	
GD-J80(B)	80	295	80	98	133	164.5	80	121	-	
GD-J100(B)	100	328.5	99	108	154	185	100	142	-	
GD-S160(B)	150	393	153	138	235	255.5	100	220	-	

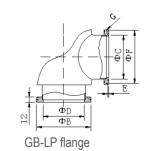


MODEL GDQ-J63(B)	DN		Dimension lable ( mm )						
MODEL	DIN	Α	В	C	D	Е	F	G	
GDQ-J63(B)	63	255	63	88	108	142	154	40	_
GDQ-J80(B)	80	267	80	98	118	157	168.5	50	_
GDQ-J100(B)	100	306	100	108	137	176.5	190	60	_
GDQ-J160(B)	150	406.5	153	138	208	242	253.5	94	_
GDQ-S200(B)	200	503	200	178	258	356	320	94	KF50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

# **FLANGE SIZE**



	В	95	110	130	180	240
	C	70	83	102	153	213
	D	63	80	99	153	200
ΦD O	E	_	_	_	_	_
ΦB	F	92	107	127	175	235
ange	G	1.5	1.5	1.5	2.5	2.5



	GB-LP flange								
DN	63	80	100	160	200	250			
В	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			

85C 80 NG RR (F)



## **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.





BSO68

**OIL / VACUUM FLANGE AND FITTING** 



BSO46

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	BSF	BSF120	
Filter Model	10L	30	L	120L
Maximum Processing Flow M³/h (L/min)	36(10)	108(	432(120)	
Air Inlet	KF25	KF4	VF50	
Exhaust Vent	KF25	KF4	G4	
Applicable Pump	DRV10/ DRV16 BSV24	BSV30/40 (For high loads)	BSV60/90 (For low loads)	BSV175 BSV275
Weight (kg)	1	7.	40	







## **VACUUM FLANGE AND FITTING**





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



**MEMORANDUM** 

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