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九天真空公众号

真空超市

VACUUM VALVE

VACUUM TECHNOLOGY EMPOWERS HIGH-END MANUFACTURING

CONTENTS

COMPANY INTRODUCTION

The brand of CBVAC was founded in 2002.

Our industry belongs to vacuum fields, we are a comprehensive high-tech enterprise specialized in vacuum products development, design, production, sales and service. We have succeeded in developing the first dry scroll vacuum pump in China, the first DN3000 oppositely pressure-resistant high-speed vacuum gate valves in China, and the first 7 sheets engineered MOCVD vapor deposition equipment in China under the cooperative development with Chinese Academy of Sciences. The fully reflects the company's independent innovation ability. CBVAC will adhere to the advanced management concept, the high quality of the products, to realize fast development as a leading brand excellent and advanced enterprise in both international and domestic vacuum industry.

CBVAC Beijing company Chuanbei vacuum technology(Beijing) co.,LTD is located in Changping district of Zhong - guangcun national independent innovation demonstration garden,covers the area more than 10000 square meters, CBVAC Sichuan company Sichuan JiuTian Vaccum Technology Corporation Limited is located in Duofu industry park in Nanchong city, covers the area more than 60000 square meters. At present, CBVAC brand has four leading main product categories including vacuum valves, vacuum pumps, vacuum flanges & vacuum bellows, vacuum integrated equipments. The vacuum products and technologies are widely applied in new energy, new materials, national defense, aerospace, semiconductor, manufacturers for vacuum equipment, universities, scientific research institutions and other strategic emerging industries.

Our company owned an excellent R&D team consists of professor of engineering ,senior engineers and engineers, from which 3 people are the commissioners from China vacuum technology standardization technology committee and China machinery industry laboratory instruments and equipment standardization technical committee(CMIF/TC16),participated the making of a number of national standards and industry standards.2 people enjoy the State Council's allowance, other main technical personnel also own rich experiences in vacuum valves& vacuum equipments technologies, also engaged in design work with dozens of years in the vacuum fields. With the sustainable technical innovation for many years, we constantly launch the new products and new structures, also acquired dozens of national utility model patent certificates and one national invention patent.

CBVAC will continue to adhere to the sincere, innovative, pragmatic and efficient. Constantly offering high quality products and first-class service to our clients, contribute to the construction of beautiful China.

Beijing Factory


Sichuang Factory


Valve Production Line


Company Platform

荣誉资质

PERFORMANCE OF HONOR

PRODUCT CLASSIFICATION

Gate Valve

Flap Valve

Angle Valve

Charge Valve

Regulating Valve

APPLICATION FIELDS

IT industry, semiconductor industry, aviation and aerospace, environmental simulation, LED industry, photovoltaic industry, medicine and biological engineering, vacuum coating, testing, metallurgy, welding, heat treatment, scientific instruments development, new energy, new materials, environmental protection, chemical industry, etc

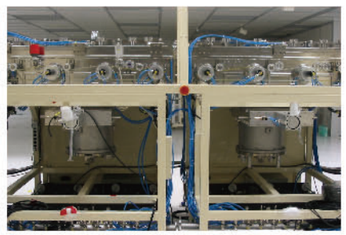
LED industry

Photovoltaic industry

Vacuum Furnace

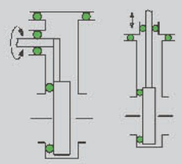
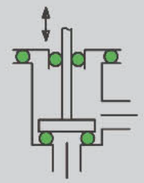
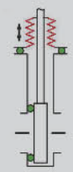
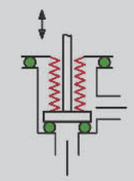
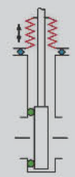
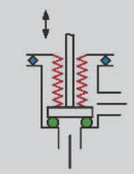
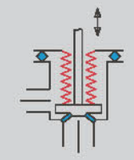
Aerospace

Semiconductor industry



Vacuum Equipment

VALVE SEAL STRUCTURE

Viton Seal(high vaccum) Viton $> 1 \cdot 10^{-5}$ pa		
Bellow Seal **(ultra high vaccum)** Viton Bellow $> 1 \cdot 10^{-6}$ pa		
Metal static Seal **(ultra high vaccum)** Viton Metal Bellow $> 1 \cdot 10^{-7}$ pa		
All metal Seal **(high vaccum)** Viton Metal **(CBVAC)** Bellow $> 1 \cdot 10^{-8}$ pa		

ORDER INFORMATION

How to select the valves

- Please check the catalogue details in order select a right valve.
- View the Main technical features and get to know if the products are available, such as cycle times, open and close time, temperature range, operating orientation and so on.
- The valves' order number is set by valves body material, driven mode, flanges type, sealing type and nominal diameter.
- The requested voltage should be added in the order number for pneumatic valves and electric valves.
- If any other spare parts needed or other special requirements, please make literal illustration and add the information in the order mode(X).

Explanation of Model Number

CCQ — 100 B G K

CBVAC Series

Nominal diameter(mm)

10 16 25 40(35)
50 63 80 100
160(150) 200
250 320 400
500 630 800
1000 1250

Shafe seal type

code	Type
B	Bellwo sealed
	Fluorine rubber

Material for Valve Body

code	Material
G	Stainless Steel
L	Aluminum

Flange type

Code	Type
K	KF
C	CF
L	LF
F	ISO-F
P	GB-LP
Z	Rectangylar Valves

※ If no special instruction,all the material are 304

Oder Format

1010 | 24VDC | (X)

No.	Power supply voltage	Other Information
The order number is the ID number of standard valves	24VDC 220V/50Hz 380V/50Hz Blank mean no voltage	Spare parts or special requirements Can be remarked literally

Ordering example.

Standard Valve: 1216, 220V/50Hz
Ultra-High Vacuum Pneumatic Gate Valve, DN100, stainless steel valve body, voltage with 220V/50Hz, bellow sealed, CF flange
Model Number should be CCQ-100BGC
Standard Valve (With requirements remark) :
2049 (including open-close position indicator switch)
High Vacuum Manual Angle Valve, DN25, aluminum valve body, bellow sealed, KF flange, including open-close position indicator switchv

Pocket Ultra-high Vacuum Gate Valves

Introduction:

This series of valves are made up of manual and pneumatic gate valves. The design of this series' structure is reasonable, and the appearance is excellent. Besides, they have many advantages, such as stability, small size, durability, great sealing, longer service life and so on. As a result, they can apply to the ultra-high vacuum equipment. The motivities of this series of valves are manual rotating handle, air cylinder driven by compressed air and the driver torque of motor to produce electromagnetic force. They drive the start and stop of valveplates through the connection between swing bar and valve plate. Applicable medium can be pure air and non-corrosive gas.

Features:

- Adopt stainless steel bellows, no lube.
- Stainless steel valve body, good rigidity, small sizes and excellent appearance.
- Adopt double-guide-rail structure, smooth movement; monolithic construction inside the valve and well-distributed holding power.

Order Information:

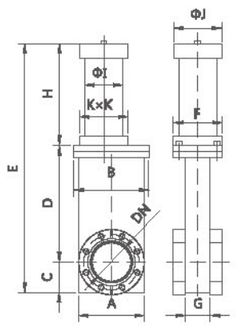
DN (mm)	Order no.			
	Manual Valves		Pneumatic Valves	
	KF	CF	KF	CF
25	1001	1002	1201	1202
40 (35)	1003	1004	1203	1204
50	1005	1006	1205	1206

Main Capacity Targets:

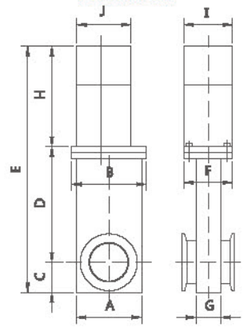
- Application scope:
  1×10^{-5}Pa～1.2×10^{-5}Pa (O-ring sealing)
  1×10^{-6}Pa～1.2×10^{-5}Pa (O-ring sealing)
- Differential pressure before open valve plates:
  ≤3×10^{3} Pa Any direction
- Leak rate of valves' body and base:
  1.3×10^{-7} Pa·L·s^{-1}
- Cycles until first service: 10，000 times
- Baking Temperate of valve bodies:
  Open≤200℃; Close≤150℃
- Mounting position: Any direction
- Power supply: pneumatic: AC220V 50Hz，6W or DC24V，3W
  (Special specification can be customized)
- Compressed air(only supply to pneumatic valves):0.4～0.7MPa
- Speed of closing or opening: pneumatic valves: ≤3s;
- Indications of valves' position:
  manual valves: with indication of start and stop's positions (mechanical type)
  pneumatic valves: with indication of start and stop's positions (magnetic switch)
- Valves' weight: refer to Weight Brochure

External Dimensions:

Manua



Pneumatic



Manua:

Mode:	DN	External Dimensions（mm）										
		A	B	C	D	E	F	G	H	I	J	K
CC-25(B)	25	62	78	33	120	278	64	34	125	50	63	64
CC-40(B)	40	76	91	35	152.5	312.5	64	34	125	50	63	64
CC-50(B)	50	88.1	98	41	152	326.5	64	34	133.5	50	63	64

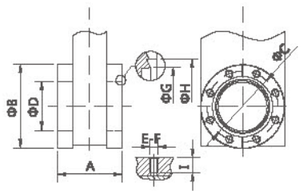
Pneumatic:

Mode:	DN	External Dimensions（mm）								
		A	B	C	D	E	F	G	H	I	J
CCQ-25(B)	25	62	78	33	120	284	64	34	131	64	64
CCQ-40(B)	40	76	91	35	152.5	315	64	34	127.5	64	64
CCQ-50(B)	50	88.1	98	41	152	325.5	64	34	132.5	64	71

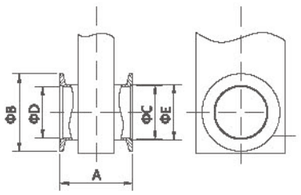
Remark: (B) means Bellow sealing.

Flange Size:

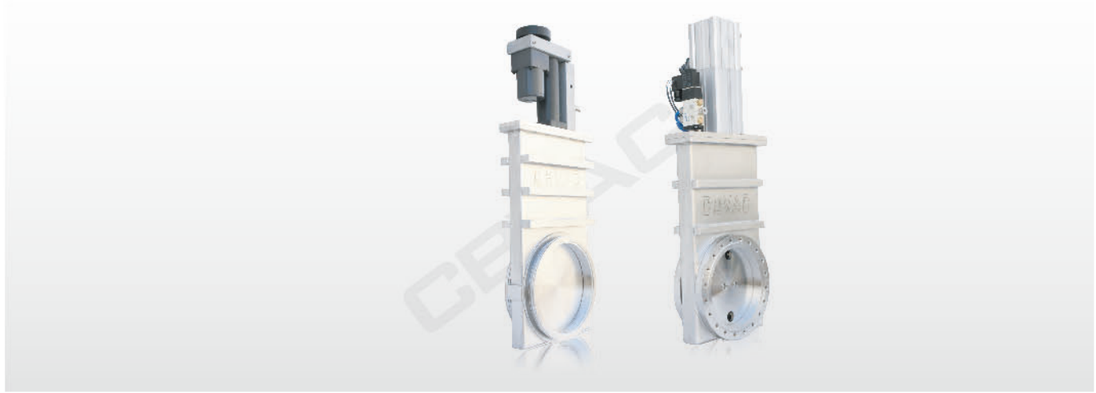
DN25-50 CFflange



DN25-50 KFflange



	DN	A	B	C	D	E	F	G	H	I
CF	25	55	54	43	25	6	M6	29.5	35	10.5
	35	60	70	58.7	35	6	M6	42	48.3	10
	50	66.3	86	72.4	50	8	M8	55.6	61.6	12
KF	25	66	40	26.2	25	28				
	40	70	55	41.2	40	44.5				
	50	68.3	75	52	50	56				



Ultra-high Vacuum Gate Valve

Introduction:

This series of valves are made up of manual, pneumatic and electromagnetic gate straight valves. The design of this series' structure is reasonable, and the appearance is excellent. Besides, they have many advantages, such as stability, small size, durability, great sealing, long service life and so on. As a result, they can apply to the ultra-high vacuum equipment. The motivities of this series of valves are manual rotating handle, air cylinder driven by compressed air and the driver torque of motor to produce electromagnetic force. They drive the start and stop of valve plates through the connection between swing bar and valve plate. Applicable medium can be pure air and non-corrosive gas.

Features:

- Adopt stainless steel bellows and viton o- ring sealing, no lube.
- Stainless steel valve body, inside welding, lower leak rate.
- Stiffener valve body structure, small size and excellent appearance.
- Adopt double-guide-rail structure, smooth movement; monolithic construction inside the valve and well-distributed holding power.

Order Information:

The order numbers of each product are as follows. Customers can search the numbers according to the operation mode of valves, flange size or nominal diameter. If order pneumatic valves, please add the appointed voltage to the order number.

Order Example: 1216, 220VAC

Ultra-high Pneumatic Gate Valves, DN=100mm、Voltage: AC 220V, 50Hz, CF flange

DN (mm)	Order no.											
	Manual Valves				Pneumatic Valves				Motor-driven Valves			
	CF	LF	ISO-F	GB-LP	CF	LF	ISO-F	GB-LP	CF	LF	ISO-F	GB-LP
63	1010	1011	1069	1012	1210	1211	1337	1212	—	—	—	—
80	1013	1014	1070	1015	1213	1214	1338	1215	—	—	—	—
100	1016	1017	1071	1018	1216	1217	1339	1218	1501	1502	1557	1503
160	1019	1020	1072	1021	1219	1220	1340	1221	1504	1505	1558	1506
200	1022	1023	1073	1024	1222	1223	1341	1224	1507	1508	1559	1509
250	1025	1026	1074	1027	1225	1226	1342	1227	1510	1511	1560	1512
320	1075	1028	1076	1029	1343	1228	1344	1229	1561	1513	1562	1514
400	-	-	-	-	1345	1230	1346	1231	1563	1515	1564	1516

Remark: The Flange sizes are as follows

Main Capacity Targets:

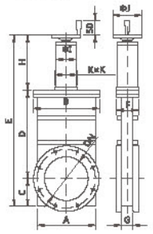
- Application scope: 1×10^{-7}Pa～1.2×10^{5}Pa
- Differential pressure before open valve plates: ≤3×10^{3}Pa Any direction
- Leak rate of valves' body and base: 1.3×10^{-7} Pa·L·s^{-1}
- Cycles until first service: 10，000 times
- Baking Temperate of valve bodies: Open≤200℃; Close≤150℃
- Position of installation: Any
- Power supply:
  - pneumatic valves: AC 220V 50Hz，6W or DC 24V，3W
  - motor-driven valves:
  DN 63~250:AC 220V 50Hz，25W or AC 380V 50 Hz，25W
  DN 320~400 AC:220V 50Hz，40W or AC 380V 50 Hz，40W
  (Special specification can be customized)
- Compressed air(only supply to pneumatic valves)
  - DN 63~200: 0.4～0.7MPa
  - DN 250~400: 0.5～0.7MPa
- Speed of closing or opening:
  - pneumatic valves: DN 63~250 ≤6s; DN 320~400 ≤10s
  - motor-driven valves: DN 63~250 ≤50s; DN 320~400 ≤70s
- Indications of valves' position:
  - manual valves: with indication of start and stop's positions (mechanical type)
  - pneumatic valves: with indication of start and stop's positions (magnetic switch)
  - motor-driven valves: with indication of start and stop's positions (micro switch)

Valves' weight: Are as follows

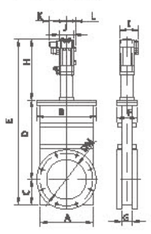
DN (mm)	Weight/ kg											
	Manual Valves				Pneumatic Valves				Motor-driven Valves			
	CF	LF	ISO-F	GB-LP	CF	LF	ISO-F	GB-LP	CF	LF	ISO-F	GB-L
63	6.3	5.0	6.5	6.5	6.7	6.6	6.6	6.3	—	—	—	—
80	8.2	8.4	8.6	8.6	8.0	8.6	8.6	8.5	—	—	—	—
100	9.7	9.0	9.8	9.8	9.6	9.0	9.0	9.6	15.0	14.3	14.8	14.8
160	16.5	14.3	16.5	16.5	16.3	14.5	14.5	15.7	21.8	20.0	21.5	21.5
200	24.1	22.5	23.5	23.5	25.2	23.0	23.0	24.0	30.4	29.8	30.4	30.4
250	36.8	35.5	31.0	31.0	31.0	33.0	33.0	30.5	34.0	32.5	34.5	34.5
320	43.2	40.5	42.0	42.0	40.5	45.0	45.0	43.2	47.5	48.3	48.6	48.6
400	62.3	55.6	58.0	58.0	57.6	56.2	56.2	57.0	63.0	62.7	64.7	64.7

External Dimensions:

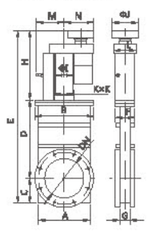
Manual



Pneumatic



Motor-driven



Manual : The Flange sizes are as follows

Model	DN	External Dimensions (mm)										
		A	B	C	D	E	F	G	H	I	J	K
CC-63(B)	63	110	130	52	173	378	64	34	153	56	100	64
CC-80(B)	80	130	140	57	228	461.5	75	36	176.5	69	100	75
CC-100(B)	100	144	170	68	241	500	74	40	191	70	100	75
CC-160(B)	160	201	226	95.5	328	652.5	76	45	229	69	100	75
CC-200(B)	200	258	276	120	414.5	763.5	76	47	229	69	100	76
CC-250(B)	250	310	334	146	500	957.5	87	54.5	311.5	70	125	86
CC-320(B)	320	425	449	212.5	669.5	1191.5	138	78	309.5	75	125	118
CC-400(B)	400	—	—	—	—	—	—	—	—	—	—	—

Pneumatic: The Flange sizes are as follows

Model	DN	External Dimensions (mm)										
		A	B	C	D	E	F	G	H	I	J	K	L
CCQ-63(B)	63	110	130	52	173	365.5	64	34	140.5	64	72	76.5	40
CCQ-80(B)	80	130	140	57	228	447	75	36	162	77	84	88.5	38.5
CCQ-100(B)	100	144	170	68	241	615	74	40	306	97	75	86	46
CCQ-160(B)	160	201	226	95.5	328	771.5	76	45	348	97	75	86	46
CCQ-200(B)	200	258	276	120	414.5	897.5	76	47	363	117	95	86	54
CCQ-250(B)	250	310	334	146	500	947	87	54.5	301	143	117	96	69.5
CCQ-320(B)	320	425	449	212.5	669.5	1329	138	78	447	141	115	86	64
CCQ-400(B)	400	512	536	256	810	1624	138	78	558	162	140	86	79

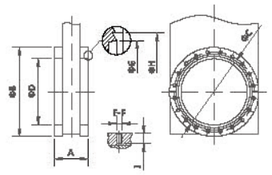
Motor-driven: The Flange sizes are as follows

Model	DN	External Dimensions (mm)												
		A	B	C	D	E	F	G	H	I	J	K	L	M	N
CCD-100(B)	100	144	170	68	241	551.5	74	40	242.5	69	100	75	86	101	106
CCD-160(B)	160	201	226	95.5	328	705.5	76	45	282	69	100	76	92	101	121
CCD-200(B)	200	258	276	120	414.5	816.5	76	47	282	69	100	76	92	89	121
CCD-250(B)	250	310	334	146	500	956	87	54.5	310	70	100	86	92	106	121
CCD-320(B)	320	425	449	212.5	669.5	1218	138	78	336	80	110	118	108	105	140
CCD-400(B)	400	512	536	256	810	1475	138	78	409	80	110	117	118	108	140

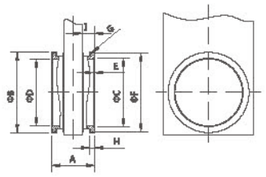
Gate Valve

Flange Size:

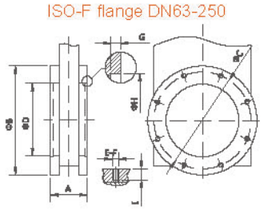
CF flange DN63-400



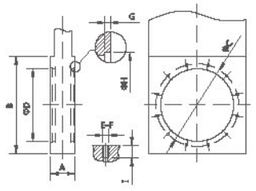
ISO-K63-400 flange



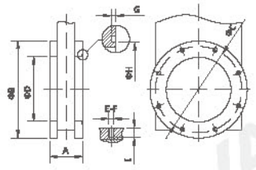
ISO-F flange DN63-250



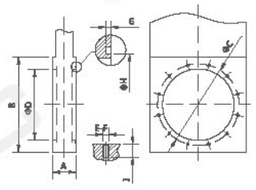
ISO-F flange DN320-400



GB-LP flange DN63-250



GB-LP flange DN320-400



DN	CF flange								ISO-F flange							
	63	80	100	160	200	250	320	400	63	80	100	160	200	250	320	400
A	64	72	71	81	85	97.5	130	147	88	90	100	105	107	114.5	164	164
B	114	130	152	202	253	305	425	512	95	110	130	180	240	290	370	450
C	92.2	110	130.3	181	231.9	284	338.1	437.9	70.2	83.2	102.2	153.2	213.2	261.2	318	400
D	63	80	100	150	200	250	300	400	63	80	100	150	200	250	318.2	400.2
E	8	16	16	20	24	32	32	40	3	3	3	3	2.5	2.5	4.5	4.5
F	M8	M8	M8	M8	M8	M8	M10	M10	92	107	127	175	235	285	365	442
G	77	93	115	166	217	267	320	419	1.5	1.5	1.5	2.5	2.5	2.5	2.5	4
H	82.4	99	120.6	171.4	222.1	273.1	326.4	424.4	12	12	12	12	12	12	17	17
I	12	12	12	12	15	15	18	18	27	27	30	30	32	32	43	43

DN	ISO-F flange								GB-LP flange							
	63	80	100	160	200	250	320	400	63	80	100	160	200	250	320	400
A	58	60	64	77	79	90.5	108	112	58	60	64	77	79	90.5	108	112
B	130	145	165	225	285	335	425	512	130	145	165	225	285	335	425	512
C	110	125	145	200	260	310	395	480	110	125	145	200	260	310	395	480
D	63	80	100	150	200	250	318	400	63	80	100	150	200	250	320	400
E	4	8	8	8	12	12	12	16	4	8	8	8	12	12	12	16
F	M8	M8	M8	M10	M10	M10	M12	M12	M8	M8	M8	M10	M10	M10	M12	M12
G	3	3	3	3	3	3	4.5	4.5	2.6	2.4	2.6	2.6	3.6	3.6	4.8	4.8
H	70.2	83.2	102.2	153.2	213.2	261.2	318.2	400.2	68	85	105	165	218	268	328	410
I	10	10	10	13	13	15	15	16	10	11	10	13	13	16	15	16
I.D.	—	—	—	—	—	—	—	—	67	85	106	165	218	268	325	406
d	—	—	—	—	—	—	—	—	3.55	3.55	3.55	3.55	5.3	5.3	7	7

Remark: Optional parts: Viton O-ring

High Vacuum Gate Valves

Introduction:

This series of valves are made up of manual, pneumatic and electromagnetic gate straight valves. The design of this series' structure is reasonable, and the appearance is excellent. Besides, they have many advantages, such as stability, small size, durability, great sealing, long service life and so on. As a result, they can apply to the ultra-high vacuum equipment. The motivities of this series of valves are manual rotating handle, air cylinder driven by compressed air and the driver torque of motor to produce electromagnetic force. They drive the start and stop of valve plates through the connection between swing bar and valve plate. Applicable medium can be pure air and non-corrosive gas.

Features:

- O-ring sealing at small angle, no lube.
- The inner of valves' body is welded by stainless steel and the leak rate is low.
- Stiffener valve body structure, small size and excellent appearance.
- Adopt double-guide-rail structure, smooth movement; monolithic construction inside the valve and well-distributed holding power.

Order Information:

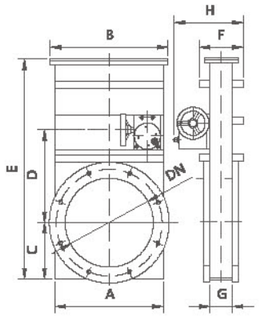
DN (mm)	Order No.											
	Manual Valves				Pneumatic Valves				Motor-driven Valves			
	CF	ISO-k	ISO-F	GB-LP	CF	ISO-k	ISO-F	GB-LP	CF	ISO-k	ISO-F	GB-LP
63	1121	1122	1123	1124	1401	1402	1403	1404	—	—	—	—
80	1125	1126	1127	1128	1405	1406	1407	1408	—	—	—	—
100	1129	1130	1131	1132	1409	1410	1411	1412	1629	1630	1631	1632
160	1133	1134	1135	1136	1413	1414	1415	1416	1633	1634	1635	1636
200	1137	1138	1139	1140	1417	1418	1419	1420	1637	1638	1639	1640
250	1141	1142	1143	1144	1421	1422	1423	1424	1641	1642	1643	1644

Main Capacity Targets:

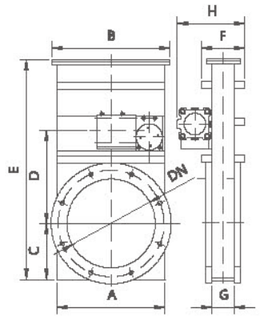
- Application scope: 1×10^{-5}Pa~1.2×10^{5}Pa
- Differential pressure before open valve plates: $\leq3\times10^{3}$Pa Any direction
- Leak rate of valves' body and base: 1.3×10^{-7} Pa·L·s^{-1}
- Cycles until first service: 20, 000 times
- Baking Temperate of valve bodies: Open≤200℃; Close≤150℃
- Mounting position: any direction
- Power supply:
  - pneumatic valves: AC 220V 50Hz, 6W or DC 24V, 3W
  - motor-driven valves:
  DN 63~250 AC 220V 50Hz, 25W
  AC 380V 50 Hz, 25W
  (Special specification can be customized)
- Compressed air(only supply to pneumatic valves)
  -pneumatic valves: ≤6s
  -motor-driven valves: ≤50s
- Valve's Weight: Refer to Weight Brochure
- Indications of valves' position:
  - manual valves: with indication of start and stop's positions (mechanical type)
  - pneumatic valves: with indication of start and stop's positions (magnetic switch)
  - motor-driven valves: with indication of start and stop's positions (micro switch)

External Dimensions:

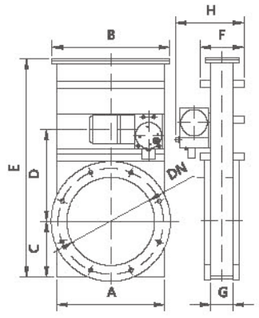
Manual



Pneumatic



Motor-driven



Manual :

Model	DN	External Dimensions (mm)							
		A	B	C	D	E	F	G	H
GC-C63	63	110	130	52	98	225	81	45	153
GC-C80	80	130	140	57	113	283	90	51	166
GC-C100	100	151	178	74.5	153	312	95	56	168
GC-C160	160	201	228	95.5	187	395	95	59	168
GC-C200	200	248	276	120	232	502	95	60	168
GC-C250	250	310	342	158	276	618	124	64	195

Pneumatic:

Model	DN	External Dimensions (mm)							
		A	B	C	D	E	F	G	H
GCQ-C63	63	110	130	52	98	225	81	45	140
GCQ-C80	80	130	140	57	113	283	90	51	153
GCQ-C100	100	151	178	74.5	153	312	95	56	155
GCQ-C160	160	201	228	95.5	187	395	95	59	155
GCQ-C200	200	248	276	120	232	502	95	60	155
CCQ-C250	250	310	342	158	276	618	124	64	182

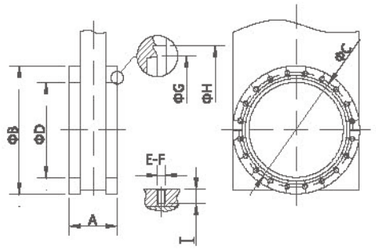
Motor-driven:

Model	DN	External Dimensions (mm)							
		A	B	C	D	E	F	G	H
GCD-C100	100	151	178	74.5	228	537	75	36	234.5
GCD-C160	160	201	228	95.5	302	657.5	75	41	260.5
GCD-C200	200	248	276	120	380	771	75	42	271
GCD-C250	250	310	342	146	463	880	80	48	271

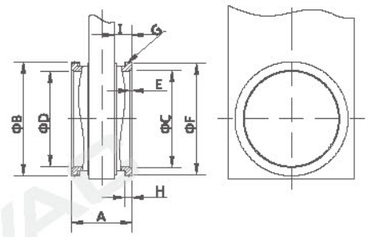
Gate Valve

Flange Size:

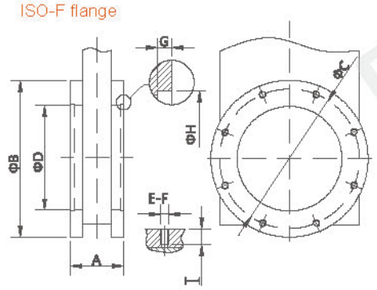
CF flange



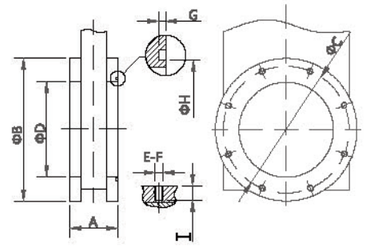
ISO-K flange



ISO-F flange



GB-LP flange



DN	CF flange						ISO-K flange					
	63	80	100	160	200	250	63	80	100	160	200	250
A	83	92	95	99	103	107	109	115	120	123	124	128
B	114	130	152	202	253	305	95	110	130	180	240	290
C	92.2	110	130.3	181	231.9	284	70.2	83.2	102.2	153.2	213.2	261.2
D	63	80	100	150	200	250	63	80	100	150	200	250
E	8	16	16	20	24	32	3	3	3	3	2.5	2.5
F	M8	M8	M8	M8	M8	M8	92	107	127	175	235	285
G	77	93	115	166	217	267	1.5	1.5	1.5	2.5	2.5	2.5
H	82.4	99	120.6	171.4	222.1	273.1	12	12	12	12	12	12
I	12	12	12	12	15	15	27	27	30	30	32	32

DN	ISO-F flange						GB-LP flange					
	63	80	100	160	200	250	63	80	100	160	200	250
A	78	84	93	93	96	100	78	84	93	93	96	100
B	130	145	165	225	285	335	130	145	165	225	285	335
C	110	125	145	200	260	310	110	125	145	200	260	310
D	63	80	100	150	200	250	63	80	100	150	200	250
E	4	8	8	8	12	12	4	8	8	8	12	12
F	M8	M8	M8	M10	M10	M10	M8	M8	M8	M10	M10	M10
G	3	3	3	3	3	3	2.6	2.4	2.6	2.6	3.6	3.6
H	70.2	83.2	102.2	153.2	213.2	261.2	68	85	105	165	208	258
I	10	10	10	13	13	15	10	11	10	13	13	16
I.D.	—	—	—	—	—	—	67	85	106	165	206	258
d	—	—	—	—	—	—	3.55	3.55	3.55	3.55	5.3	5.3

Remark: Optional parts: Viton O-ring

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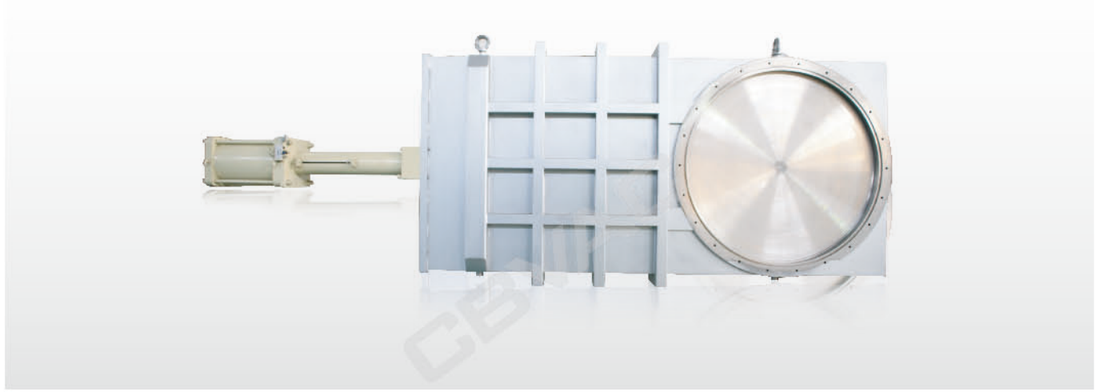


Huge Ultra-high Vacuum Gate Valves

Brief Introduction:

This series of valves are pneumatic ones. The design of this series' structure is reasonable, and the appearance is excellent. Besides, they have many advantages, such as stability, low shock vibration, durability, great sealing, long service life and so on. As a result, they are one of initial optional valves in huge automatic vacuum equipment. The motivities of this series of valves are manual rotating handle, air cylinder driven by compressed air and the driver torque of motor to produce electromagnetic force. They drive the start and stop of valve plates through the connection between swing bar and valve plate. Applicable medium can be pure air and non-corrosive gas.

Features:

- Adopt the structure of multi swinging rods with uniform distribution support. The valves open with low shock vibration and little noise.
- Stability and little noise.
- Adopt stainless steel bellows and viton o- ring sealing.
- The inner of valves' body is welded by stainless steel and the leak rate is low.

Order Information:

The order numbers of each product are as follows. Customers can search the numbers according to flange size and nominal diameter, and add the appointed voltage to the order number.

Order Example: 1239, 220VAC

Ultra-high Pneumatic Gate Valves, DN=1320mm、Voltage: 220v; AC; 50Hz, GB-LP flange

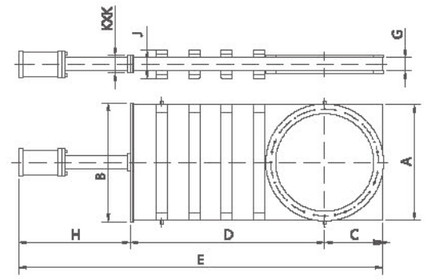
DN (mm)	Order No. Pneumatic Valves ISO-F	Order No. Pneumatic Valves GB-LP	DN (mm)	Order No. Pneumatic Valves GB-LP
500	1232	1233	1000	1237
630	1234	1235	1250	1238
800	—	1236	1320	1239

Remark: Optional parts: Viton O-ring

Main Capacity Targets:

- Application scope: 1×10^{-6}Pa～1.2×10^{5}Pa
- Differential pressure before open valve plates: ≤1×10^{3}Pa Any direction
- Leak rate of valves' body and base: 1.3×10^{-7} Pa·L·s^{-1}
- Cycles until first service: 10，000 times
- Baking Temperate of valve bodies: ≤150℃
- Position of installation: horizontal or vertical
- Power supply: AC 220V 50Hz 6W or DC 24V 3W (Special specification can be customized)
- Compressed air: 0.5～0.7MPa
- Speed of closing or opening: according to nominal diameter For ISO500&630 Pneumatic Gate Valve, 10 seconds; for ISO500&630 Motor Driven Gate Valve,40 seconds.
- Indications of valves' position: with indication of start and stop's positions (magnetic switch)
- Valves' weight: according to nominal diameter

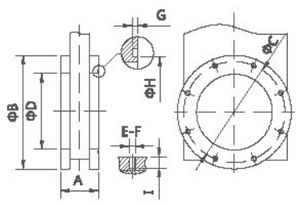
External Dimensions



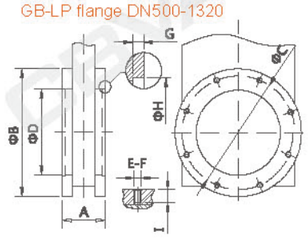
Model	DN	External Dimensions (mm) A	B	C	D	E	G	H	J	K
CCQ-500B	500	610	634	306	1024	2001	110	671	170	117
CCQ-630B	630	760	798	375	1285	2470	160	810	248	176
CCQ-800B	800	920	968	460	1650	3066	150	956	218	200
CCQ-1000B	1000	1180	1230	566	2030	3632	180	1036	300	240
CCQ-1250B	1250	1450	1530	776	2532	4841	226	1533	386	306
CCQ-1320B	1320	1480	1520	740	2478	4660	169	1442	230	329

Flange Size:

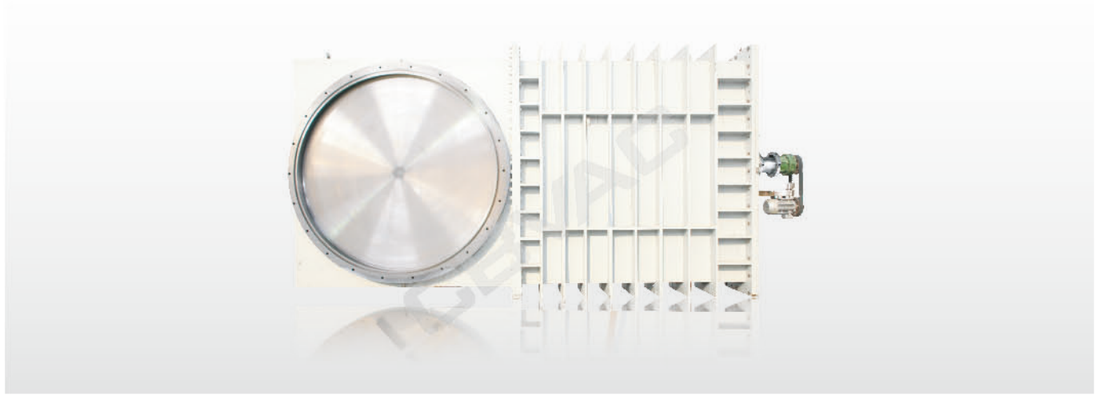
ISO-F flange DN500-630



GB-LP flange DN500-1320



DN	ISO-F Flange 500	ISO-F Flange 630	GB-LP Flange 500	GB-LP Flange 630	GB-LP Flange 800	GB-LP Flange 1000	GB-LP Flange 1250	GB-LP Flange 1320
A	150	210	150	210	200	226	280	230
B	616	760	616	760	920	1120	1440	1500
C	580	720	580	720	890	1090	1404	1422
D	500	630	500	630	800	1000	1250	1320
E-F	16-M12	20-M12	16-M12	20-M12	24-M12	32-M12	32-M16	32-M16
G	4.8	4.8	4.8	4.8	7	7	9	9
H	501	651	510	640	810	1020	1270	1340
I	16	22	16	22	22	22	26	28



Ultra Large Vacuum Gate Valves

Brief Introduction:

This series of valves are motor-driven ones. The design of this series' structure is reasonable, and the appearance is excellent. Besides, they have many advantages, such as stability, low shock vibration, durability, great sealing, long service life and so on. As a result, they are widely used in military and industrial areas. The motivities of this series of valves are three-phase asynchronous motor or variable frequency motor, connected to the gear reducer and the reducer output shaft is connected between coupler and screw rod, leading the driver's axial movement. They drive the start and stop of valve plates through the connection between swing bar and valve plate.

Features:

- Adopt the structure of many oscillating bars sustain well-distributed. The valves open with low shock vibration and little noise.
- With structure of reverse support movement, realize the seal with reverse pressure.
- Dynamic seal adopts Star Viton O-ring so as to a lower leak rate and higher sealability.
- The inner of valves' body is welded by stainless steel and the leak rate is low.
- Adopt technology of variable frequency motor, the braking effect is excellent and the shock is little.

Order Information:

DN (mm)	Order No. Motor-driven 304	Order No. Motor-driven Carbon Steel	DN (mm)	Order No. Motor-driven 304	Order No. Motor-driven Carbon Steel
1600	1601	1609	2400	1605	1613
1800	1602	1610	2600	1606	1614
2000	1603	1611	2800	1607	1615
2200	1604	1612	3000	1608	1616

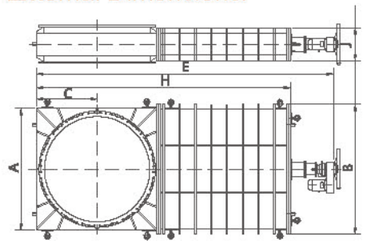
Main Capacity Targets:

- Application scope:
  - CS valve body: 6.3×10^{-4}Pa~1.0×10^{5}Pa
  - 304 valve body: 6.3×10^{-5}Pa~1.0×10^{5}Pa
- Differential pressure before open valve plates:
  - DN1600~DN2000: ≤1×103Pa Any direction
  - DN2200~DN3000: ≤0.6×103Pa Any direction
- Position of installation: Driver horizontal or Valve body vertical (Special requirements can be customized.)
- Power supply: AC380V 50Hz with Controller and reserved port (Special requirements can be customized.)
- Temperature of air: -5℃~50℃ (*)
- Speed of closing or opening: according to nominal diameter

- Leak rate of valves' body and base:
  - 304 valve body: 6.3×10^{-7} Pa·L·s^{-1}
  - CS valve body: 1.3×10^{-5} Pa·L·s^{-1}
- Cycles until first service: 5,000 times
- Baking Temperate of valve bodies: ≤150℃
- Medium of Valve: Air or non-corrosive gas
- Indications of valves' position: with indication of start and stop's positions (without power supply switch indication)
- Valves' weight: according to nominal diameter

Remark: "*"means the environmental temperature when the valve works normally, if the medium is high temperature, will adopt water-cooling valve. Special requirements can be customized.

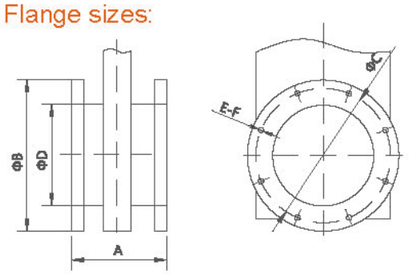
External Dimensions:



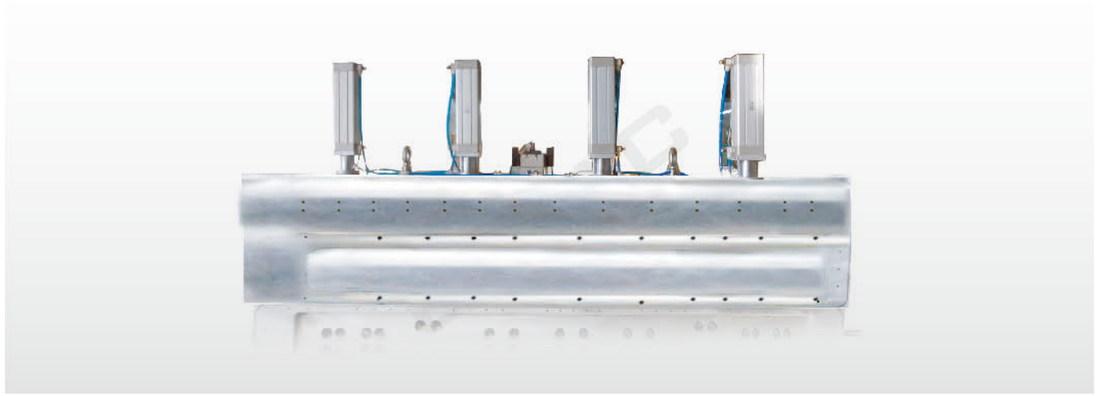
The Flange sizes are as follows

Model	DN	External Dimensions (mm) A	B	C	E	H	J
GCD-1600	1600	1720	1800	867	5360	3781	357
GCD-1800	1800	2215	2400	1056	6345	5200	636
GCD-2000	2000	2266	2386	1121	6470	4820	710
GCD-2200	2200	2600	2800	1286	6870	5768	700
GCD-2400	2400	2816	3036	1390	7150	6156	780
GCD-2600	2600	3010	3230	1500	7710	6486	886
GCD-2800	2800	3215	3435	1620	8119	6900	926
GCD-3000	3000	3586	3936	1690	8130	7250	1066

Flange sizes:



DN	1600	1800	2000	2200	2400	2600	2800	3000
A	450	570	710	860	980	1020	1056	1086
B	1800	1990	2254	2475	2685	2905	3115	3315
C	1760	1947	2210	2390	2600	2810	3020	3220
D	1600	1800	2000	2200	2400	2600	2800	3000
E-F	44-Φ20	48-Φ24	52-Φ24	52-Φ28	52-Φ32	56-Φ32	60-Φ35	60-Φ38



Rectangular High Vacuum Gate Valves

Brief Introduction:

This series of valves are motor-driven ones. The design of this series' structure is reasonable, and the apphis series of valves are pneumatic ones. The design of this series' structure is reasonable, and the appearance is excellent. Besides, they have many advantages, such as stability, low shock vibration, durability, great sealing, and long service life and so on. As a result, they are one of initial optional valves in automatic vacuum equipment of semiconductor industry. The motivity of this series of valves is air cylinder driven by compressed air. They drive the start and stop of valve plates through the connection between swing bar and valve plate. Applicable medium can be pure air and non-corrosive gas.

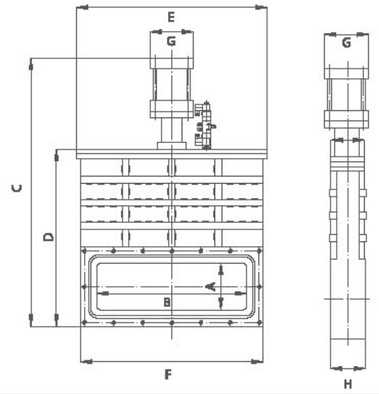
Features:

- Adopt the structure of multi swinging rods with uniform distribution support, sustain well-distributed. The valves open with low shock vibration and little noise.
- stability and little noise.
- Adopt stainless steel bellows and viton o-ring
- The inner of valves' body is welded by stainless steel and the leak rate is low.
- Pass more workpieces one time in a smaller size, and use the space reasonably.

Main Capacity Targets:

- Application scope: 1×10^{-6}Pa～1.2×10^{5}Pa
- Differential pressure before open valve plates: $\leq2\times10^{3}$Pa Any direction
- Leak rate of valves' body and base: 1.3×10^{-7} Pa·L·s^{-1}
- Cycles until first service: 10，000 times
- Baking Temperate of valve bodies: ≤150℃
- Position of installation: horizontal or vertical
- Power supply: AC 220V 50Hz 6W or DC 24V 3W (Special specification can be customized)
- Compressed air: 0.5～0.7MPa
- Time of valves' open or close: according to DN
- Indications of valves' position: with indication of start and stop's positions (magnetic switch)
- According to DN

External Dimensions:



Model	External Dimensions (mm)								
	A	B	C	D	E	F	G	H	I
GCQ-250×600	250	600	1146	758	818	790	190	150	146
GCQ-580×800	580	800	2300	1624	984	940	280	170	190
GCQ-2300×170	170	2300	1102	570	2710	2710	114	250	230
	Dimension subject to actual design, please call us for more information								

Water-cooling High Vacuum Gate Valves

Brief Introduction:

This series of valves are made up of manual and pneumatic gate straight valves. The design of this series' structure is reasonable, and the appearance is excellent. Besides, they have many advantages, such as stability, low shock vibration, durability, great sealing, long service life and so on. As a result, they are one of initial optional valves in vacuum furnace equipment. The motivities of this series of valves are manual rotating handle and air cylinder driven by compressed air. They drive the start and stop of valve plates through the connection between swing bar and valve plate.
Applicable medium can be pure air and non-corrosive gas.

Features:

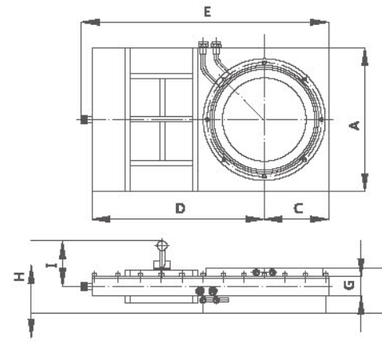
- Adopt the structure of multi swinging rods with uniform distribution support. The valves open with low shock vibration and little noise.
- stability and little noise.
- The inner of valves' body is welded by stainless steel and the leak rate is low.
- Adopt the water-cooling structure, and can be used in the occasion of large quantity of heat.

Main Capacity Targets:

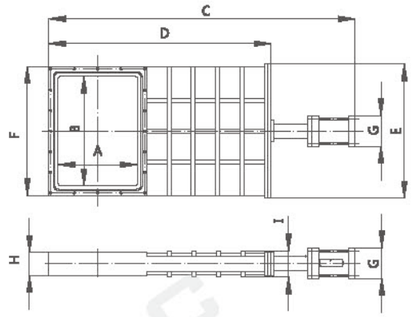
- Application scope: 1×10^{-5}Pa～1.2×10^{5}Pa
- Differential pressure before open valve plates: $\leq2\times10^{3}$Pa Any direction
- Leak rate of valves' body and base: 1.3×10^{-7} Pa·L·s^{-1}
- Cycles until first service: 10，000 times
- Baking Temperate of valve bodies: ≤150℃
- Position of installation: Arbitrary
- Power supply: AC 220V 50Hz 6W or DC 24V 3W (Special specification can be customized)
- Compressed air: 0.5～0.7MPa
- Time of valves' open or close: according to DN
- Indications of valves' position: with indication of start and stop's positions (magnetic switch)
- According to DN

External Dimensions:

Manual



Pneumatic



Model	External Dimensions (mm)								
	A	B	C	D	E	F	G	H	I
GC Series GCQ Series	Please call us for more information								

High Vacuum Angle Valves

Brief Introduction:

This series of valves are made up of manual, pneumatic and electromagnetic block straight valves. The design of this series' structure is reasonable, and the appearance is excellent. Besides, they have many advantages, such as stability, small size, durability, great sealing, and long service life and so on. As a result, they are one of initial optional valves in vacuum equipment. The motivities of this series of valves are manual rotating handle, air cylinder driven by compressed air and coil switched on to produce electromagnetic force. They drive the start and stop of valve plates through the connection between mechanism and valve plates. Applicable medium can be pure air and non-corrosive gas.

Features:

- Standardized and modular design, easy to change and maintain.
- Easy to clean up.
- Electromagnetic valves are designed in an energy saving way and the size is small.

Order Information:

The order numbers of each product are as follows. Customers can search the numbers according to material, the driven mode, flange, sealing model and DN. If order pneumatic valves, please add the appointed voltage to the order number.

Order Example: 2249, 220VAC

High Vacuum Pneumatic Block Straight Valves DN=16mm、Voltage AC 220V 50Hz、Aluminum valve body, bellow sealed , KF flange

DN (mm)	Order No.											
	Aluminum						304					
	Manual		Pneumatic		Electromagnetic		Manual		Pneumatic		Electromagnetic	
	KF											
	1	2	1	2	1	2	1	2	1	2	1	2
6	—	—	—	—	—	—	2060	2016	—	—	—	—
8	—	—	—	—	—	—	2061	2017	—	—	—	—
10	—	—	—	—	—	—	2062	2018	—	—	—	—
16	2048	2004	2249	2201	2415	2401	2063	2019	2261	2213	2419	2408
25	2049	2005	2250	2202	2416	2402	2064	2020	2262	2214	2420	2409
40	2050	2006	2251	2203	2417	2403	2065	2021	2263	2215	2421	2410
50	2051	2007	2252	2204	2418	2404	2066	2022	2264	2216	2422	2411

DN (mm)	Order No.							
	304							
	Manual				Pneumatic			
	LF		GB-LP		LF		GB-LP	
	1	2	1	2	1	2	1	2
63	2067	2023	2068	2024	2265	2217	2266	2218
80	2069	2025	2070	2026	2267	2219	2268	2220
100	2071	2027	2072	2028	2269	2221	2270	2222
160	2073	2029	2074	2030	2271	2223	2272	2224
200	—	—	—	—	2273	2225	2274	2226
250	—	—	—	—	2275	2227	2276	2228

Remark: Table1 for Bellow sealed Valves
Table2 for Viton O-ring sealed Valves

Main Capacity Targets:

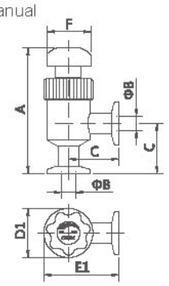
- Application scope:
  1×10^{-6}Pa～1.2×10^{5}Pa (Bellow sealed)
  1×10^{-5}Pa～1.2×10^{5}Pa (Viton O-ring sealed)
- Differential pressure before open valve plates:
  $\leq1.2\times10^{5}$ Pa Any direction
- Leak rate of valves' body and base: 1.3×10^{-7} Pa·L·s^{-1}
- Cycles until first service: 20，000 times
- Baking Temperate of valve bodies: ≤150℃
- Position of installation
  - manual valves: Any direction
  - pneumatic valves: Any direction
  - electromagnetic valves: Any direction (Bellow sealed); sealed surface direct to the vacuum (Viton O-ring sealed)
- Power supply
  - pneumatic valves: AC 220V 50Hz，6W or DC 24V，3W (Special specification can be customized)
  - electromagnetic valves: AC220Vor 230V 50Hz，Power of starting 800W、Power of working 8W
- Compressed air(only supply to pneumatic valves): 0.4～0.7MPa
- Speed of closing or opening
  - pneumatic valves: ≤1s
  - electromagnetic valves: Open≤0.1s; Close≤1s (Viton O-ring sealed)、Close≤0.5s (Bellow sealed)
- Indications of valves' position: with indication of start and stop's positions (magnetic switch)
- Valves' weight: according to nominal diameter

Optional Parts:

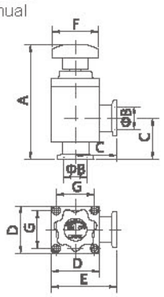
Pneumatic Valve DN 16~50: Magnet switch.
Pneumatic Valve DN 63~250: ISO Rotatable Flange, solenoid directional valve.

Features:

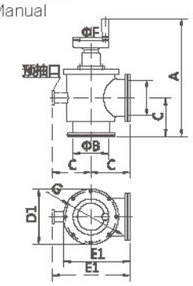
DN6~10
Manual



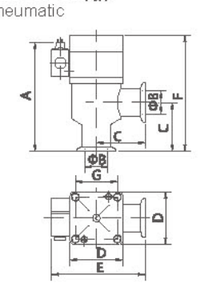
DN16~50
Manual



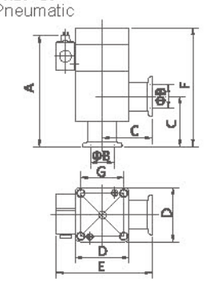
DN 63~250
Manual



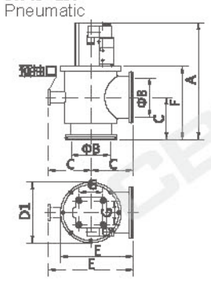
DN16~50 304阀体
Pneumatic



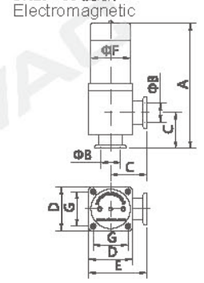
DN16~50
Pneumatic



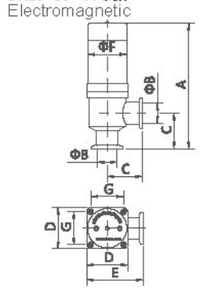
DN 63~250
Pneumatic



DN16~50 铝阀体
Electromagnetic



DN16~50 304阀体
Electromagnetic



Manual:

Model	External Dimensions（mm）										
	DN	A	B	C	D	D1	E	E1	F	G	Pre-pumping port
GD-J6(B)	6	90.4	6	35	—	36	53.5	53	32	—	—
GD-J8(B)	8	90.4	8	35	—	36	—	53	32	—	—
GD-J10(B)	10	90.4	10	35	—	36	—	53	32	—	—
GD-J16(B)	16	113.9	16	40	54	—	67	—	45	43	—
GD-J25(B)	25	119.4	25	50	54	—	77	—	45	43	—
GD-J40(B)	40	150.5	40	65	64	—	97	—	63	53	—
GD-J50(B)	50	170.5	50	70	78	—	109	—	63	66	—
GD-J63(B)	63	279	63	88	—	104	—	140	80	91	—
GD-J80(B)	80	295	80	98	—	133	—	164.5	80	121	—
GD-J100(B)	100	330.5	99	108	—	154	—	185	100	142	—
GD-S160(B)	160	409.5	150	138	—	226	—	276	100	213	KF40

Pneumatic:

Model	External Dimensions（mm）									
	DN	A	B	C	D	D1	E	F	G	Pre-pumping port
GDQ-J16(B)	16	110	16	40	54	—	86	113.5	43	—
GDQ-J25(B)	25	115	25	50	54	—	96	119	43	—
GDQ-J40(B)	40	157	40	65	64	—	116	159	53	—
GDQ-J50(B)	50	152	50	70	78	—	128	178.5	66	—
GDQ-J63(B)	63	237.5	63	88	—	130	153	152	40	—
GDQ-J80(B)	80	263.5	80	98	—	133	170.5	168.5	50	—
GDQ-J100(B)	100	298	100	108	—	154	185	187	60	—
GDQ-S160(B)	160	545.5	153	138	—	226	276	256.5	77	KF40
GDQ-S200(B)	200	515.5	200	178	—	254	356	322	77	KF50
GDQ-S250(B)	250	749.5	250	208	—	330	416	409.5	89	LF63

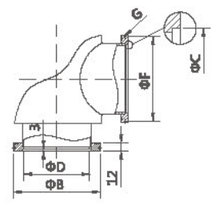
Electromagnetic:

Model	External Dimensions（mm）									
	DN	A	B	C	D	D1	E	E1	F	G
GDC-J16	16	177.5	16	40	54	54	67	67	53	43
GDC-J16B	16	177.5	16	40	54	54	67	67	53	43
GDC-J25	25	183	25	50	54	54	77	77	53	43
GDC-J25B	25	183	25	50	54	54	77	77	53	43
GDC-J40	40	220.5	40	65	76	76	103	103	78	53
GDC-J40B	40	220.5	40	65	76	76	103	103	78	53
GDC-J50	50	251.5	50	70	78	78	109	109	78	66
GDC-J50B	50	251.5	50	70	78	78	109	109	78	66

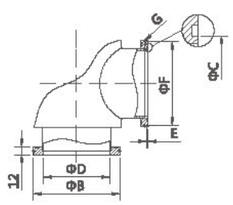
Remark: D1 is for Dimensions of Stainless steel valve body, D is for Dimensions of Aluminum valve body.

Flange Size:

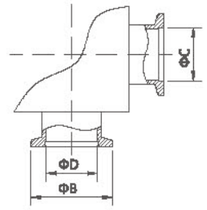
ISO-K flange



GB-LP flange



KF flange



DN	KF flange				ISO-K flange						GB-LP flange					
	16	25	40	50	63	80	100	160	200	250	63	80	100	160	200	250
B	30	40	55	75	95	110	130	180	240	290	95	110	130	180	240	290
C	17.2	26.2	41.2	52.2	70	83.2	102.2	154	213.2	261.2	68	85	105	165	208	258
D	16	25	40	48	66	80	99	153.2	200	250	65	80	100	154	200	250
E	—	—	—	—	3	3	3	3	3	4.5	2.4	2.4	2.4	2.4	3.6	3.6
F	—	—	—	—	92	107	127	175	235	285	92	107	127	175	235	285
G	—	—	—	—	1.5	1.5	1.5	2.5	2.5	2.5	1.5	1.5	1.5	2.5	2.5	2.5

Large High Vacuum Angle Valves

Brief Introduction:

This series valves are pneumatic ones. They have the advantages such as stability, durability, great sealing and long service life and so on. As a result, they are one of the initial optional valves in automatic vacuum equipment. They use compressed air as driving force, valves change direction of gas line by electromagnetic reversing valves, implement air cylinder driving baffle valve plates to perform start and stop. Applicable medium can be pure air and non-corrosive gas.

Features:

- D Standardized and modular design, easy to change and maintain.
- Easy to clean up.
- Valves are made by stainless steel.

Order Information:

The order numbers of each product are as follows. Customers can search the numbers according to the kinds of flange, sealing, DN of valves.
Order Example : 2279，220VAC
High Vacuum Pneumatic Block Straight Valves, DN=400mm、Voltage AC 220V 50Hz、Stainless steel valve body, bellow sealed , ISO-K flange

DN (mm)	Order No.			
	304			
	Pneumatic			
	LF		GB-LP	
	1	2	1	2
320	2277	2229	2278	2230
400	2279	2231	2280	2232
500	2281	2233	2282	2234
630	2283	2235	2284	2236

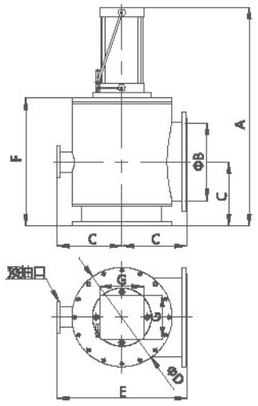
Remark: D1 is for Dimensions of Stainless steel valve body, D is for Dimensions of Aluminum valve body.

Main Capacity Targets:

- Application scope:
  1×10^{-5}Pa～1.2×10^{5}Pa (Bellow sealed)
  1×10^{-5}Pa～1.2×10^{5}Pa (Viton O-ring sealed)
- Differential pressure before open valve plates:
  ≤5×10^{3}Pa Any direction
- Leak rate of valves' body and base:
  1.3×10^{-7} Pa·L·s^{-1}
- Cycles until first service：10，000 times
- Baking Temperate of valve bodies：≤150℃

- Position of installation：Any direction
- Power supply：AC 220V 50Hz，6W or DC 24V，3W (Special specification can be customized)
- Compressed air：0.5～0.7MPa
- Speed of closing Speed of closing and opening：≤5s
- Indications of valves' position： with indication of start and stop's positions (magnet switch)
- Valves' weight： according to nominal diameter
- Referring to the above table.

External Dimensions:

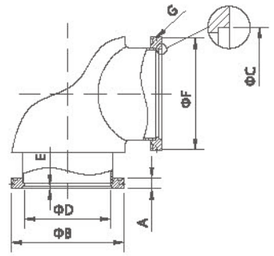


Model	GDQ-S320	GDQ-S400	GDQ-S500	GDQ-S630
DN	320	400	500	630
A	856	1067	1198	1398
B	320	400	500	630
C	250	330	360	450
D	400	510	616	760
E	500	660	720	900
F	516	624	701	860
G	115	145	145	145
Pre-pumping port	LF80	LF100	LF125	LF160

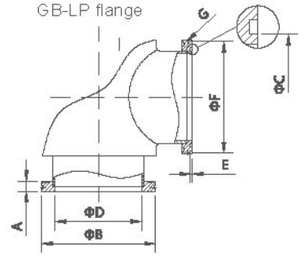
Remark: If need bellow-sealed, the model number should add “B”

Flange size:

ISO-K flange



GB-LP flange



DN	ISO-K flange				GB-LP flange			
	320	400	500	630	320	400	500	630
A	17	17	17	22	17	17	17	22
B	370	450	550	690	370	450	550	690
C	318	400	501	651	328	410	510	640
D	318	400	500	630	320	400	500	630
E	4.5	4.5	4.5	6	4.8	4.8	4.8	4.8
F	365	442	542	680	365	442	542	680
G	2.5	4	4	5	2.5	4	4	5

Optional Parts:

ISO Rotatable Flange, solenoid directional valve.

CF Series Ultra-high Vacuum Angle Valves

Brief Introduction:

This series valves are applicable to the vacuum line's start and stop of ultra-high vacuum system. They are two different vacuum block valves; these are manual ones and pneumatic ones. They have many advantages, such as stability, durability, great sealing, and long service life and so on, so they are one of initial optional valves in ultra-high vacuum equipment. Manual valves take manual rotating handle as motivity, and helical transmission to make valves start and stop. The direction of start and stop takes marks on the handles as the standard. Pneumatic valves take compressed air as motivity to make valves start and stop. Valve plates will close automatically depending on spring force when losing air source. Applicable medium can be pure air and non-corrosive gas.

Features:

- Standardized and modular design, easy to change and maintain.
- Easy to clean up.
- Adopt stainless steel bellows and viton O-ring, no lube.
- Stainless steel valve body with inside welding, lower leak rate.

Order Number:

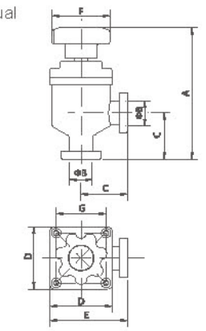
DN (mm)	Order Number	
	Bonnet with Viton ring sealing, Dynamic seal with bellow sealing	
	Manual	Pneumatic
16	2089	2297
25	2090	2298
40	2091	2299
50	2092	2300

Main Capacity Targets:

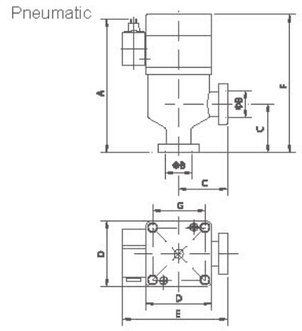
- Application scope: 1×10^{-6}Pa～1.2×10^{5}Pa
- Differential pressure before open valve plates: ≤1.2×10^{5} Pa Any direction
- Leak rate of valves' body and base:
- Cycles until first service: 800，000 times
- Baking Temperate of valve bodies: Open≤200℃； Close≤150℃
- Position of installation: Any direction
- Power supply AC 220V 50Hz，6W or DC 24V，3W (Special request can be customized)
- Compressed air(only supply to pneumatic valves): 0.4～0.7MPa
- Speed of closing or opening (only for pneumatic valves): ≤1s
- Indications of valves' position -manual valves: with indication of start and stop's positions - pneumatic valves: with indication of start and stop's positions(magnet switch)
- Valves' weight: Referring to the above table.

External Dimensions:

Manual



Pneumatic



Manual:

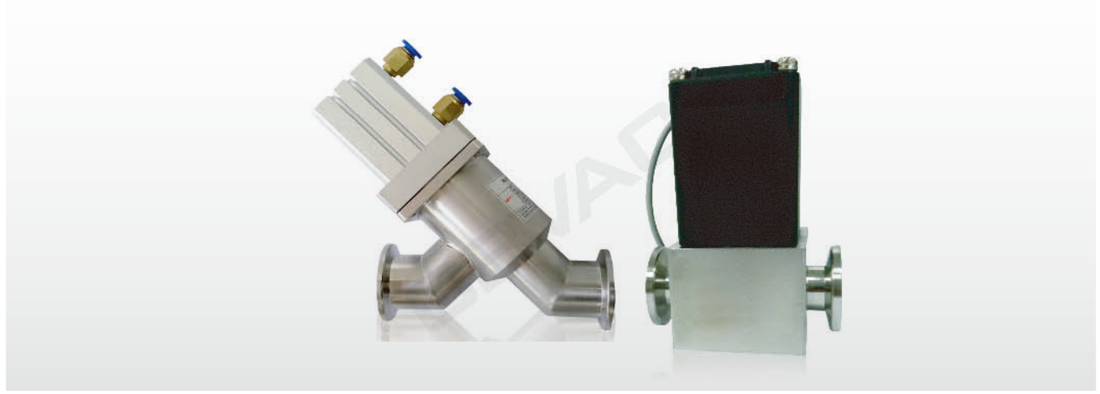
Model	DN	Connecting flange	Manual						
			A	B	C	D	E	F	G
CD-J16B	16	CF16	114	16	40	54	67	45	43
CD-J25B	25	CF25	127.5	25	55	54	86	45	43
CD-J40B	40	CF35	148.5	35	63	64	95	53	53
CD-J50B	50	CF50	170.5	50	80	78	123	63	66

Pneumatic:

Model	DN	Connecting flange	Manual						
			A	B	C	D	E	F	G
CDQ-J16B	16	CF16	110	16	40	54	86	113.5	43
CDQ-J25B	25	CF25	123	25	58	54	104	127	43
CDQ-J40B	40	CF35	135	35	63	64	114	157	53
CDQ-J50B	50	CF50	161.5	50	80	92	138	188.4	86

CF flange are subject to the standard GB/T 6071-2003

Optional Parts: Magnet switch.



KF Series High Vacuum Straight Angle Valves

Brief Introduction:

This series of valves are made up of manual, pneumatic and electromagnetic block straight valves. They have many advantages, such as stability, small size, durability, great sealing, and long service life and so on. As a result, they are one of initial optional valves in automatic vacuum equipment. The motivities of this series of valves are manual rotating handle, air cylinder driven by compressed air and coil switched on to produce electromagnetic force. They drive the start and stop of valve plates through the connection between mechanism and valve plates. Applicable medium can be pure air and non-corrosive gas.

Features:

- Standardized and modular design, easy to change and maintain.
- Easy to clean up.
- Energy saving design for electromagnetic valves, small size.

Order Number:

DN (mm)	Order Number:							
	45°straight valves						90°straight valves	
	304						Aluminum	304
	Manual		Pneumatic		Electromagnetic		Electromagnetic	Electromagnetic
	1	2	1	2	1	2	2	2
6	—	—	—	—	—	—	2441	2448
8	—	—	—	—	—	—	2442	2449
10	—	—	—	—	—	—	2443	2450
16	2113	2109	2341	2337	2499	2495	—	—
25	2114	2110	2342	2338	2450	2496	—	—
40	2115	2111	2343	2339	2488	2497	—	—
50	2116	2112	2344	2340	2489	2498	—	—

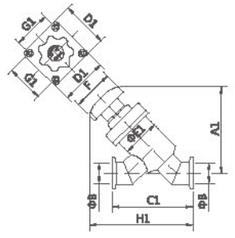
Remark: Table 1 for Bellow sealed Valves
Table 2 for Viton O-ring sealed Valves

Main Capacity Targets:

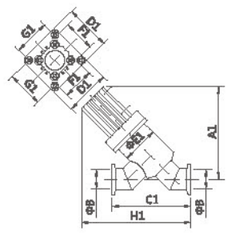
- Application scope:
  1×10^{-6}Pa～1.2×10^{5}Pa (Bellow sealed)
  1×10^{-5}Pa～1.2×10^{5}Pa (Viton O-ring sealed)
- Differential pressure before open valve plates:
  ≤1.2×10^{5}Pa Any direction
- Leak rate of valves' body and base: 1.3×10^{-7} Pa·L·s^{-1}
- Cycles until first service: 200，000 times
- Baking Temperate of valve bodies: ≤150℃
- Position of installation: Any direction
- Power supply
  - pneumatic valves: AC 220V 50Hz，6W or DC 24V，3W (Special specification can be customized)
  - electromagnetic valves: AC 220V or 230V 50Hz，Power of starting 800W、Power of working 8W
- Compressed air(only supply to pneumatic valves): 0.4～0.7MPa
- Speed of closing or opening
  - pneumatic valves: ≤1s
  - electromagnetic valves: Open≤0.1s; Close≤1s (Viton O-ring sealed)、Close ≤0.5s (Bellow sealed)
- Indications of valves' position
  - manual valves: with indication of start and stop's positions
  - pneumatic valves: with indication of start and stop's positions (magnet switch)
  - electromagnetic valves: with indication of start's positions

External Dimensions:

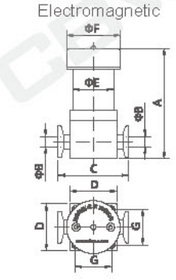
45° Straight Valves
Manual



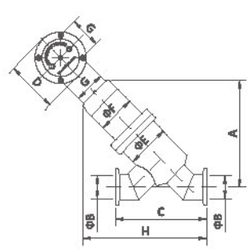
45° Straight Valves
Pneumatic



90° Straight Valves
Electromagnetic



45° Straight Valves
Electromagnetic



Manual:

Model	DN	Flange	External dimensions (mm)							
			A1	B	C1	D1	E1	F	G1	H1
GD-16(45°)	16	KF16	82	16	80	38	34	40	28	100
GD-25(45°)	25	KF25	109	25	100	58	47	50	46	128
GD-40(45°)	40	KF40	127	40	130	65	58	63	52	153
GD-50(45°)	50	KF50	144	50	160	73	74	63	60	178

Remark: If need bellow sealed valve, add "B" on the Model number.

Pneumatic:

Model	DN	Flange	External dimensions (mm)							
			A1	B	C1	D1	E1	F1	G1	H1
GDQ-16(45°)	16	KF16	89	16	80	38	34	40	28	106
GDQ-25(45°)	25	KF25	119	25	100	58	47	40	46	139
GDQ-40(45°)	40	KF40	135	40	130	65	58	64	52	167
GDQ-50(45°)	50	KF50	162	50	160	73	74	80	60	202

Remark: If need bellow sealed valve, add "B" on the Model number.

Electromagnetic :

Model	DN	Flange	External dimensions (mm)						
			A	B	C	D	E	F	G
GDC-6	6	KF6	128	6	66	42	38	50	33
GDC-8	8	KF8	128	8	66	42	38	50	33
GDC-10	10	KF10	128	10	66	44	38	50	34
GDC-16(45°)	16	KF16	148	16	80	64	34	50	39
GDC-25(45°)	25	KF25	145(167)	25	100	69	47	50	42
GDC-40(45°)	40	KF40	201(196)	40	130	94(102)	62(67)	66	57(63)
GDC-50(45°)	50	KF50	232	50	140	102(110)	74	66	63(69)

Remark: If need bellow sealed valve, add "B" on the Model number.

Optional Parts:

D-A73 Magnetic switch for pneumatic valves to indicate the opening or closing position.

High Vacuum Flap Valves

Brief Introduction:

This valve series have 3 driven modes: manual, pneumatic and motor-driven. The design of this series' structure is reasonable, and the appearance is excellent. Besides, they have many advantages, such as stability, low shock vibration, durability, great sealing, long service life and so on. As a result, they are one of initial optional valves in vacuum equipment. The valve is driven by turning handle, compressed air, motor working, the cylinder connect the valve plate, and drive the valve plate to execute the opening and closing action. The medium of this valve is air and the corrosive gas.

Characteristics :

- Standard and modular design, easy replacement and maintenance.
- Short execute distance, short opening and closing time, and low height of the valve.
- Can turn 90° when opening, wide guide ability.
- Stainless steel with inner welding for the valve body, lower leak rate.

Order Number:

DN (mm)	Order Number			
	304			
	Pneumatic			
	LF		GB-LP	
	1	2	1	2
63	2849	2801	2850	2802
80	2851	2803	2852	2804
100	2853	2805	2854	2806
160	2855	2807	2856	2808
200	2857	2809	2858	2810
250	2859	2811	2860	2812

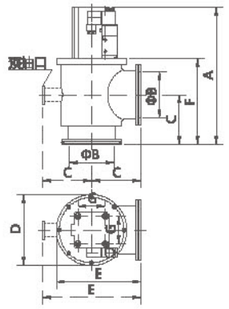
Remark: 1. Table1 for Bellow sealed Valves Table2 for Viton O-ring sealed Valves
2. Manual, and Motor-driven can be customized, should be remarked when place order.
3. For ordering method please check the page of order information.

Main Capacity Targets:

- Application scope:
  1×10^{-6}Pa～1.2×10^{5}Pa (Bellow sealed)
  1×10^{-5}Pa～1.2×10^{5}Pa (Viton O-ring sealed)
- Differential pressure before open valve plates:
  ≤1.2×10^{5}Pa Any direction
- Leak rate of valves' body and base: 1.3×10^{-7} Pa·L·s^{-1}
- Cycles until first service: 200，000 times
- Baking Temperate of valve bodies: ≤150℃
- Position of installation: Any direction
- Power supply AC 220V 50Hz，6W or DC 24V，3W (Special specification can be customized)
- Compressed air: 0.4～0.7MPa
- Speed of closing and opening: ≤1s
- Indications of valves' position: with indication of start and stop's positions (magnet switch)
- Valves' weight: Referring to the above table

External Dimensions:

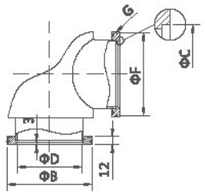
Pneumatic



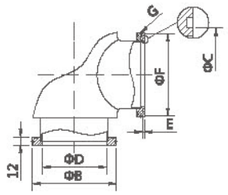
Model	ND	External dimensions (mm)							
		A	B	C	D	E	F	G	Pre-pumping port
GFQ-J63	63	213	63	88	123	149.5	154	40	—
GFQ-J80	80	238	80	98	133	164.5	168.5	50	—
GFQ-J100	100	268	100	108	154	185	187	60	—
GFQ-S160	160	376	150	138	226	276	256.5	77	KF40
GFQ-S200	200	455.5	200	178	254	356	322	77	KF50
GFQ-S250	250	614	250	208	330	416	410	84	LF63

Flange size:

ISO-K flange



GB-LP flange



DN	ISO-K flange						GB-LP flange					
	63	80	100	160	200	250	63	80	100	160	200	250
B	95	110	130	180	240	290	95	110	130	180	240	290
C	70	83	102	153	213	261	68	85	105	165	208	258
D	63	80	99	153	200	250	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	92	107	127	175	235	285
G	1.5	1.5	1.5	2.5	2.5	2.5	1.5	1.5	1.5	2.5	2.5	2.5

Optional Parts:

ISO Rotatable Flange, solenoid directional valve.

Large High Vacuum Flap Valves

Brief Introduction:

This series of valves are pneumatic ones. The design of this series' structure is reasonable, and the appearance is excellent. Besides, they have many advantages, such as stability, low shock vibration, durability, great sealing, long service life and so on. As a result, they are one of initial optional valves in huge automatic vacuum equipment. The valve is driven by compressed air, the cylinder connect the valve plate, and drive the valve plate to execute the opening and closing action. The medium of this valve is air and the corrosive gas.

Characteristics :

- Standard and modular design, easy replacement and maintenance.
- Short execute distance, short opening and closing time, and low height of the valve.
- Can turn 90° when opening, wide guide ability.
- Stainless steel for the valve body.

Order Number:

DN (mm)	Order Number			
	304			
	ISO-K		GB-LP	
	1	2	1	2
320	2861	2813	2862	2814
400	2863	2815	2864	2816
500	2865	2817	2866	2818
630	2867	2819	2868	2820

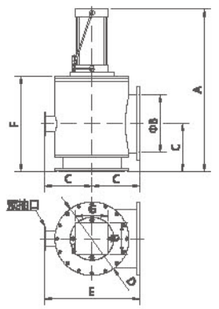
Remark: 1. Table1 for Bellow sealed Valves Table2 for Viton O-ring sealed Valves
2. For ordering method please check the page of order information.

Main Capacity Targets:

- Application scope:
  1×10^{-5}Pa～1.2×10^{5}Pa (Bellow sealed)
  1×10^{-4}Pa～1.2×10^{5}Pa (Viton O-ring sealed)
- Differential pressure before open valve plates:
  ≤5×10^{3} Pa Any direction
- Leak rate of valves' body and base: 1.3×10^{-7} Pa·L·s^{-1}
- Cycles until first service: 50，000 times
- Baking Temperate of valve bodies: ≤150℃
- Position of installation: Any direction
- Power supply AC 220V 50Hz，6W or DC 24V，3W (Special specification can be customized)
- Compressed air: 0.5～0.7MPa
- Speed of closing and opening: ≤4s
- Indications of valves' position: with indication of start and stop's positions (magnet switch)

External Dimensions:

Pneumatic

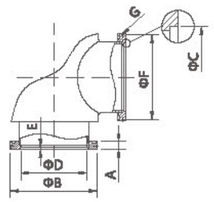


Model	GFQ-S320	GFQ-S400	GFQ-S500	GFQ-S630
DN	320	400	500	630
A	735	934	1060	1180
B	320	400	500	630
C	250	330	360	450
D	400	510	620	760
E	500	660	720	900
F	516	624	740	860
G	112	220	282	282
Pre-pumping port	LF80	LF100	LF125	LF160

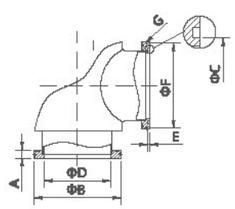
Remark: If need bellow-sealed, the model number should add "B"

Flange Size:

ISO-K flange



GB-LP flange



DN	ISO-K flange				GB-LP flange			
	320	400	500	630	320	400	500	630
A	17	17	17	22	17	17	17	22
B	370	450	550	690	370	450	550	690
C	318	400	501	651	328	410	510	640
D	318	400	500	630	320	400	500	630
E	4.5	4.5	4.5	6	4.8	4.8	4.8	4.8
F	365	442	542	680	365	442	542	680
G	2.5	4	4	5	2.5	4	4	5

Optional Parts:

ISO Rotatable Flange, solenoid directional valve with model 4V210-08.

Vacuum Charge Angle Valves

Brief Introduction:

This series of valves are made up of pneumatic and electromagnetic charge valves. The design of this series' structure is reasonable, and the appearance is excellent. Besides, they have many advantages, such as stability, small size, durability, great sealing, long service life and so on. Mainly installed at the air inlet of mechanical pump, power and motor of mechanical pump is tied to the same circuit, so the start and stop of the pump are with valves synchronously. When the pump stops, valves can close vacuum system automatically, keeping the vacuum degree, and also fill air into pump chamber and pump air inlet, and then avoid counter flowing of pump oil and polluting vacuum system. As a result, they are one of initial optional valves in automatic vacuum equipment. Valves take compressed air or electromagnetic force as motivity to make valves start and stop. Valve plates will close automatically depending on spring force when losing air source. Applicable medium can be pure air and non-corrosive gas.

Features:

- Design in a standard way and easy to change and maintain.
- Easy to clean up.
- Charging port adopt taper sealing, only little air is filled into the vacuum chamber when stop the valves.
- Electromagnetic valves are designed in an energy saving way and the size is small.

Order Number:

DN (mm)	Order Number					
	Pneumatic Valves				Electromagnetic Valves	
	Aluminum	304		Carbon steel	Aluminum	304
	KF	KF	LF		KF	
16	2350	2354	—	—	2427	2490
25	2351	2355	—	—	2428	2491
40	2352	2356	—	—	2429	2492
50	2353	2357	—	—	2430	2493
63	—	—	2358	2364	—	—
80	—	—	2359	2365	—	—
100	—	—	2360	2366	—	—
160	—	—	2361	2367	—	—

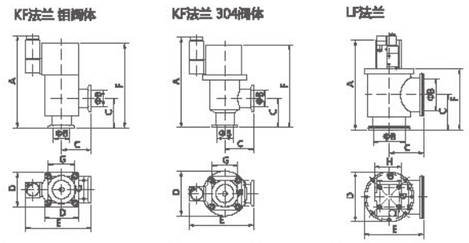
Remark:1. KF flange are subject to GB/T 4982-2003（IDT ISO 2861-1:1974(E)）
2. ISO-K flange are subject to GB/T 6070-2007（MOD ISO 1609:1986）

Main Capacity Targets:

- Application scope: 1×10^{-3}Pa～1.2×10^{5}Pa
- Differential pressure before open valve plates: ≤1.2×10^{5} Pa Any direction
- Leak rate of valves' body and base: 1.3×10^{-5} Pa·L·s^{-1}
- Cycles until first service: 200，000 times
- Around air temperature: -25℃～50℃
- Position of installation: The sealing flange of Valve plates are connected to the air inlet of the pump
- Power supply
  - pneumatic valves: AC 220V 50Hz，6W or DC 24V，3W (Special specification can be customized)
  - electromagnetic valves: AC 220V or 230V 50Hz，Power of starting 800W、Power of working 8W
- Compressed air(only supply to pneumatic valves): 0.4～0.7MPa
- Time of valves' start and stop
  - pneumatic valves: ≤1s
  - electromagnetic valves: Opening≤0.1s；Closing≤1s
- Indications of valves' position
  -pneumatic valves: with indication of start and stop's positions (magnet switch)
  - electromagnetic valves: with indication of start's positions

External Dimensions:

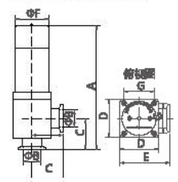
Pneumatic



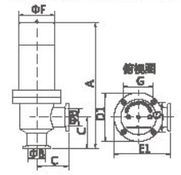
Model	DN	Connecting Flange	External dimensions（mm）								
			A	B	C	D	D1	E	F	G	H
DDQ-JQ16	16	KF16	120	16	35	40	51	81	107.5	28	—
DDQ-JQ25	25	KF25	140	25	45	52	69	101	130	40	—
DDQ-JQ40	40	KF40	158	40	55	64	86	120	157	50	—
DDQ-JQ50	50	KF50	188	48	65	80	92	129	189	50	—
DDQ-JQ63	63	LF63	223	63	88	—	103	153	154	40	57
DDQ-JQ80	80	LF80	254	80	98	—	133	165	169	50	71
DDQ-JQ100	100	LF100	283	100	108	—	154	185	187	60	84
DDQ-JQ160	160	LF160	385	153	138	—	235	256	252	77	109

Electromagnetic valves

KF flange
Material: Aluminum



KF flange
Material: Stainless steel



Model	DN	Flange	External dimensions（mm）								
			A	B	C	D	D1	E	E1	F	G
DDC-JQ16	16	KF16	164.5	16	38	48	64	62.5	70.5	44	39
DDC-JQ25	25	KF25	190	25	45	56	69	73.5	80	50	44
DDC-JQ40	40	KF40	217	40	55	72	94	91.5	102.5	66	57
DDC-JQ50	50	KF50	243	50	58	78	102	97.5	109.5	72	63

Remark: D1 and E1 show the dimensions of Stainless steel valve body, D and E show the dimensions of Aluminum valve body
Magnetic switch

KF Series High Vacuum Charge Valves

Brief Introduction:

his series of valves are made up of manual and electromagnetic charge valves. They play air inflation role in high vacuum pipe line. They have many advantages, such as small size, durability, great sealing, and long service life and so on. As a result, they are one of initial optional valves in automatic vacuum equipment. The motivities of this series of valves are manual rotating handle and electromagnetic force which can drive the valve cores to make valves' start and stop. Applicable medium can be pure air and non-corrosive gas.

Features:

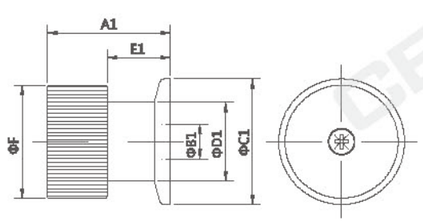
- Simple structure and easy to change and maintain.
- Easy to clean up.

DN (mm)	Order Number				
	Manual	Electromagnetic			
	304				
	—	normally close	normally open	normally close	normally open
2	—	2469	2467	2473	2471
3	—	—	—	2474	2472
4	2130	2470	2468	—	
10	2131	—	—	—	

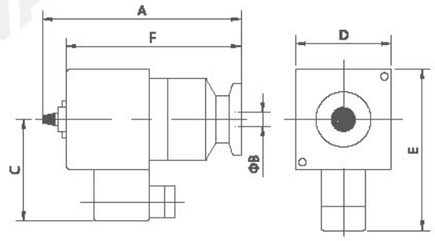
Main Capacity Targets:

- Application scope: 1×10^{-5}Pa～1.2×10^{5}Pa
- Differential pressure before open valve plates: ≤1.2×10^{5}Pa
- Leak rate of valves' body and base: 1.3×10^{-7} Pa·L·s^{-1}
- Cycles until first service: 200，000 times
- Baking Temperate of valve bodies: 80℃
- Position of installation: KF flange position
- Power supply(only supply to electromagnetic valves): AC 220V 50Hz，15W or DC 24V，6W (Special specification can be customized)
- Speed of closing or opening: - electromagnetic valves: ≤0.5s
- Valves' weight: referring to the above table

Manual Stainless steel body



Electromagnetic Stainless Steel body



Manual:

Model	DN	Connecting flange	External dimensions（mm）					
			A1	B1	C1	D1	E1	F1
GD-Q4	4	KF16	39.4	4	30	18	21.4	26
GD-Q10	10	KF25	44	10	40	25	23	36

Electromagnetic:

Model	DN	flange	External dimensions（mm）											
			A		B		C	C1	D	D1	E	E1	F	F1
GDC-Q2	2	KF16	107		2		43.5	7	40	42	30	63	64	79
GDC-Q3	3	KF16	107		3		—	7	—	42	—	30	—	79
GDC-Q4	4	KF16	107		4	—	49	—	40	—	74	—	82	—

Remark: A1-F1 is for Stainless steel valve size, A-F is for Aluminum valve size

Ultra-High Vacuum Adjustable Gate valve

Brief Introduction:

This series of valves are made up of gate valves with stepping motor. The design of this series' structure is reasonable, and the appearance is excellent. Besides, they have many advantages, such as high precision, long service life and so on. As a result, they are widely used in ultra-high vacuum equipments where current flow needs to be controlled by Valve's open level. The motivities of this series of valves are stepping motor, and the transmission rod pulls the connecting rod, leading the driver's axial movement. They drive the start and stop of valve plates through the connection between swing bar and valve plate. Throttled by valve, driven by driver, stepping motor and controller. The controller offers a position control model which allows the valve to control the speed at any position when the valve is open or close. The power supply controller can be controlled manually, and it is pulse signal which controls the power supply so as to acquire a high speed and an exact location. Applicable medium can be pure air and non-corrosive gas.

Features:

- Adopt stainless steel bellows and viton o- ring sealing, no lube.
- The inner of valves' body is welded by stainless steel and the leak rate is low.
- Valve bodies design in rib structure, with small sizes, light weight and excellent appearance.
- Adopt double-guide-rail structure, smooth movement; monolithic construction inside the valve and well-distributed holding power.
- Driven by stepping motor, the position of valve open plate can be controlled optionally and the throttle can be controlled.

Order information:

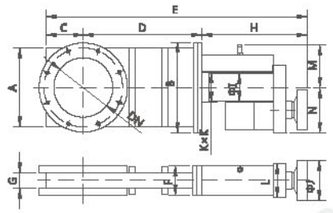
DN (mm)	Order No.			
	The cover sealed by Viton O-ring, motor sealing sealed by bellow			
	CF	LF	ISO-F	GB-LP
100	1575	1576	1591	1577
160	1578	1579	1592	1580
200	1581	1582	1593	1583
250	1584	1585	1594	1586

Main Capacity Targets:

- Application scope: 1×10^{5}Pa～1.2×10^{5}Pa (the cover sealed by Viton O-ring)
- Differential pressure before open valve plates: ≤3×103Pa Any direction
- Power supply: AC220V 50Hz orDC <50V, max current 5.5A
- Speed of closing or opening : Any

- Cycles until first service: 10, 000 times
- Baking temperature of valve body: open≤200℃; close≤150℃
- Position of installation : Any.
- Indications of valve's position : with indication of start and stop's positions (micro switch) , other positions are controlled by pulse.
- Weight : refer to Weight Brochure.

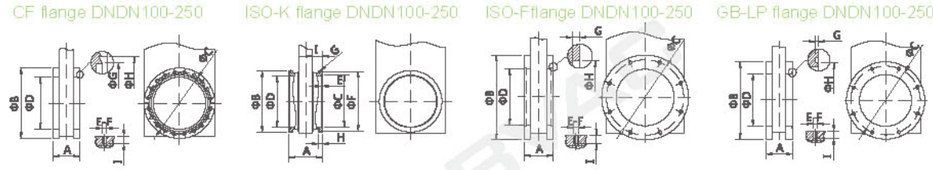
External Dimensions:



Model	DN	External dimensions (mm)													
		A	B	C	D	E	F	G	H	I	J	K	L	M	N
CCJ-100B	100	151	178	74.5	228	539.5	75	36	237	70	110	75	105.5	108	128.5
CCJ-160B	160	201	228	95.5	302	663.5	75	41	266	70	110	75	125.5	108	155
CCJ-200B	200	248	276	120	380	774	75	42	274	70	110	75	126	108	160
CCJ-250B	250	310	342	146	462.5	882.5	80	48	274	70	110	80	126	108	154

Flange size:

CF flange DNDN100-250 ISO-K flange DNDN100-250 ISO-Fflange DNDN100-250 GB-LP flange DNDN100-250



DN	CF flange				ISO-K flange				ISO-F flange				GB-LP flange			
	100	160	200	250	100	160	200	250	100	160	200	250	100	160	200	250
A	67	77	80	91	96	101	106	112	60	73	74	84	60	73	74	84
B	152	202	253	305	130	180	240	290	165	225	285	335	165	225	285	335
C	130.3	181	231.9	284	102.2	153.2	213.2	261.2	145	200	260	310	145	200	260	310
D	100	150	200	250	100	150	200	250	100	150	200	250	100	150	200	250
E	16	20	24	32	3	3	2.5	2.5	8	8	12	12	8	8	12	12
F	M8	M8	M8	M8	127	175	235	285	M8	M10	M10	M10	M8	M10	M10	M10
G	115	166	217	267	1.5	2.5	2.5	2.5	3	3	3	3	2.6	2.6	3.6	3.6
H	120.6	171.4	222.1	273.1	12	12	12	12	102.2	153.2	213.2	261.2	105	165	208	258
I	12	12	15	15	30	30	32	32	10	13	13	15	10	13	13	16
I.D.	—	—	—	—	—	—	—	—	—	—	—	—	106	165	206	258
d	—	—	—	—	—	—	—	—	—	—	—	—	3.55	3.55	5.3	5.3

Remark : LD. is inner diameter of O-ring and is its' external diameter, O-ring is optional part ;
The sealing surface of GB-LP flange valves is face to flange surface.

High Vacuum Trimming Valves

Brief Introduction:

This series of valves are manual precise trimming ones. The design of this series' structure is reasonable, and the appearance is excellent. Besides, they have many advantages, such as high precision, small size, durability, great sealing and so on, and apply to adjust the vacuum degree and gas flow of the vacuum system. The start and stop of valves take manual adjusting knob as motivity, and the valve needles' up and down by helical transmission to make valves start and stop. Applicable medium can be pure air and non-corrosive gas.

Features:

- Adopt the helical structure, and the adjusting precision is high.
- Adopt viton o-ring sealing. The inner of valves' body is welded by stainless steel and the leak rate is low.
- Valve needles and valve rods are designed separately, and install a ball seat in the connection to prolong the service life of valve needles and valve seats. Easy to maintain.

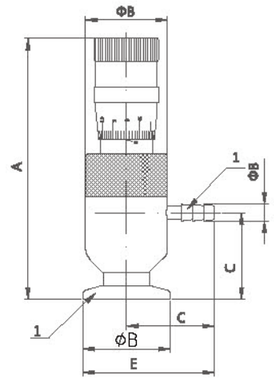
Order Information :

The order numbers of each product are as follows. Customers can search the numbers according to the flange size, DN.
Order Example: 2701
High Vacuum Trimming Manual Valves DN=0.8mm、KF-KF Flange

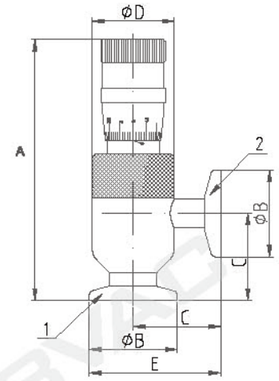
Main Capacity Targets:

- Application scope: 1×10^{-5}Pa～1.2×10^{5}Pa
- Minimum adjusting flow: 4.7×10^{-3} Pa·L/s
- Differential pressure before open valve plates: ≤1.2×10^{5} any direction
- Leak rate of valves' body and base: ≤1.3×10^{-7} Pa·L·s^{-1}
- Cycles until first maintain: 3，000 times
- Baking Temperate of valve bodies: ≤150℃
- Position of installation: Arbitrary
- Indications of valves' position: with the dial indications
- Valves' weight: Referring to the above table.

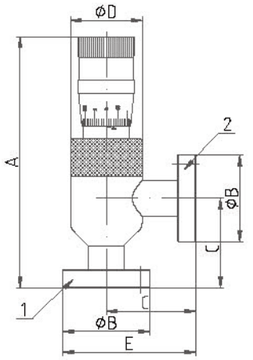
KF-Male pipe adaptor



KF-KF



CF-CF



Order No.	Model	DN	Connecting flange		External dimensions (mm)					
			1	2	A	B	C	D	E	F
2701	GW-J2	0.8	KF	KF	90	30	30	28	45	—
2702	GW-J2	0.8	CF	CF	98	34	35	28	52	—
2703	GW-J2	0.8	KF	Male Pipe Adapter	90	30	30	28	45	6
2704	GW-J4	1.2	KF	KF	93.2	30	30	28	45	
2705	GW-J4	1.2	CF	CF	98	34	35	28	52	—
2706	GW-J4	1.2	KF	Male Pipe Adapter	90	30	30	28	45	6