

# HI-VACUUM ANGLE VALVES



GD



GDQ



GDC

This valve is suitable for working medium with air and non-corrosive gas. It is used to cut or turn on the vacuum line and is one of the

important components of the vacuum system. The hand wheel is turned by hand (manual) or compressed air (pneumatic) as the driving force

and the mechanism is connected with valve plate to lift and lower, and the valve opening and closing action is completed.

## FEATURES

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

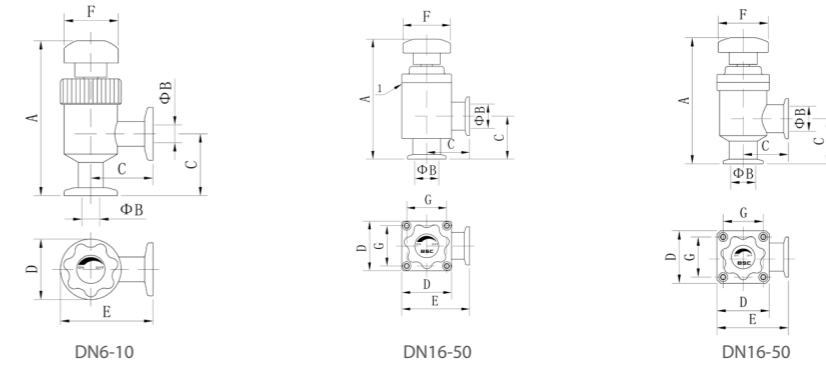
## APPLICATION

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

## GD SERIES HV MANUAL VALVE PARAMETER

MODEL		GD-J16B	GD-J25B	GD-J40B	GD-J50B
DN	mm	16	25	40	50
Pressure Range	Pa	1×10 <sup>-5</sup> ~ 5×10 <sup>5</sup>			
Pressure	Opening Direction	Pa			
Differential	Closure Direction	Pa			
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 Times			
Conductance	L/s	4.5	14	45	80
Temperature	°C	≤ 120			
Opening/Closure Time	s	Manual Operation Time			
Position Indication	—	Mechanical Indicator			
Installation Position	—	Any			
Ambient Temperature	°C	5~40			

## APPEARANCE AND FIXING DIMENSION DRAWING



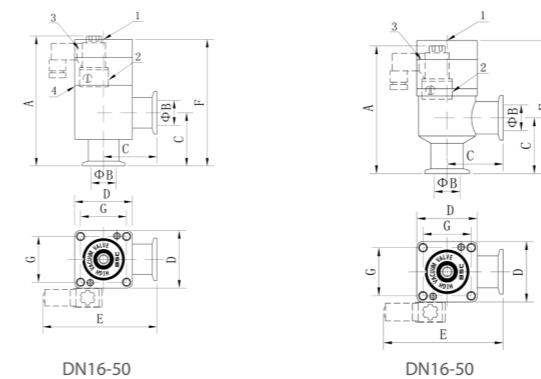
MODEL	DN	A	B	C	D	E	F	G
GD-J6~10(B)	6~10	90.4	6~10	35	36	53	32	—
GD-J16(B)	16	110	16	40	46	63	40	35
GD-J25(B)	25	120	25	50	54	77	50	43
GD-J40(B)	40	151	40	65	74	102	60	61
GD-J50(B)	50	170	50	70	78	109	60	65

## GDQ SERIES HV PNEUMATIC VALVE PARAMETER

MODEL		GDQ-J16(B)	GDQ-J25(B)	GDQ-J40(B)	GDQ-J50(B)
DN	mm	16	25	40	50
Pressure Range	Pa	1×10 <sup>-5</sup> ~ 5×10 <sup>5</sup> (1×10 <sup>-6</sup> ~ 5×10 <sup>5</sup> )			
Pressure	Opening Direction	Pa			
Differential	Closure Direction	Pa			
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 Times			
Conductance	L/s	4.5	14	45	80
Temperature	°C	≤ 120			
Power	—	A/C 220V 50Hz or D/C 24V,3W,			
Opening/Closure Time	s	≤ 0.7			
Compressed Air	MPa	0.4~0.7			
Position Indication	—	Passive Switch Signal + Mechanical Indicator			
Installation Position	—	Any			
Ambient Temperature	°C	5~40			

## APPEARANCE AND FIXING DIMENSION DRAWING

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

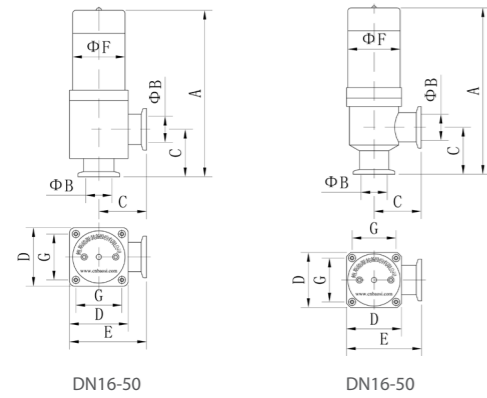


MODEL	DN	A	B	C	D	E	F	G
GD-J6~10(B)	6~10	90.4	6~10	35	36	53	32	—
GD-J16(B)	16	110	16	40	46	63	40	35
GD-J25(B)	25	120	25	50	54	77	50	43
GD-J40(B)	40	151	40	65	74	102	60	61
GD-J50(B)	50	170	50	70	78	109	60	65

## GDC SERIES HV ELECTROMAGNETIC VALVE PARAMETER

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

## APPEARANCE AND FIXING DIMENSION DRAWING



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

## GD SERIES HV MANUAL VALVE PARAMETER

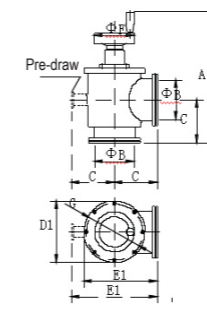
MODEL		GD-J63(B)	GD-J80(B)	GD-J100(B)	GD-S160B
DN	mm	63	80	100	150
Pressure Range	Pa	$1 \times 10^{-5} \sim 3 \times 10^5 (1 \times 10^{-6} \sim 3 \times 10^5)$			
Pressure	Opening Direction Pa	$\leq 1.0 \times 10^5$			
Differential	Closure Direction Pa	$\leq 3 \times 10^5$			
Opening Pressure Differential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

## GDQ SERIES HV PNEUMATIC VALVE PARAMETER

MODEL		GDQ-J63(B)	GDQ-J80(B)	GDQ-J100(B)	GDQ-J160(B)	GDQ-S200(B)	GDQ-S250(B)
DN	mm	63	80	100	150	200	250
Pressure Range	Pa	$1 \times 10^{-5} \sim 3 \times 10^5 (1 \times 10^{-6} \sim 3 \times 10^5)$					
Pressure	Opening Direction Pa	$\leq 1.0 \times 10^5$					
Differential	Closure Direction Pa	$\leq 3 \times 10^5$					
Opening Pressure Differential	Pa	$\leq 1.0 \times 10^5$ Any Orientation					
Leak Rate	Pa-L/s	$\leq 1.3 \times 10^{-7}$					
Switching Cycles	—	1 Million Times					
Conductance	L/s	160	200	440	1000	2000	3000
Temperature	°C	$\leq 120$					
Power	—	A/C 220V 50Hz or D/C 24V,3W,					
Opening/Closure Time	s	16	25	40	50	50	50
Compressed Air	MPa	0.4~0.7					
Position Indication	—	Magnetic Switch					
Installation Position	—	Any					
Ambient Temperature	°C	5~40					

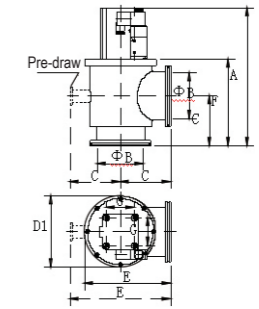
## APPEARANCE AND FIXING DIMENSION

### DN63-250 MANUAL TYPE



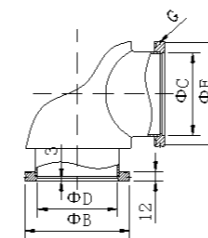
MODEL	DN	A	B	C	D	E	F	G	-
GD-J63B)	63	280	63	88	123	149.5	80	111	-
GD-J80(B)	80	295	80	98	133	164.5	80	121	-
GD-J100(B)	100	328.5	99	108	154	185	100	142	-
GD-S160(B)	150	393	153	138	235	255.5	100	220	-

### DN63-250 PNEUMATIC TYPE



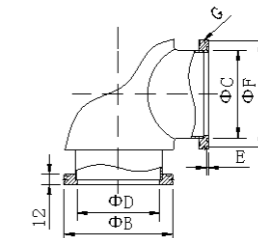
MODEL	DN	A	B	C	D	E	F	G	-
GDQ-J63(B)	63	255	63	88	108	142	154	40	—
GDQ-J80(B)	80	267	80	98	118	157	168.5	50	—
GDQ-J100(B)	100	306	100	108	137	176.5	190	60	—
GDQ-J160(B)	150	406.5	153	138	208	242	253.5	94	—
GDQ-S200(B)	200	503	200	178	258	356	320	94	KF50
GDQ-S250(B)	250	608	250	208	310	416	410	94	LF63

## FLANGE SIZE



LF flange

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



GB-LP flange

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