Semiconductor Grade Gate Valve, Stainless Steel

(Aluminum available in certain sizes)

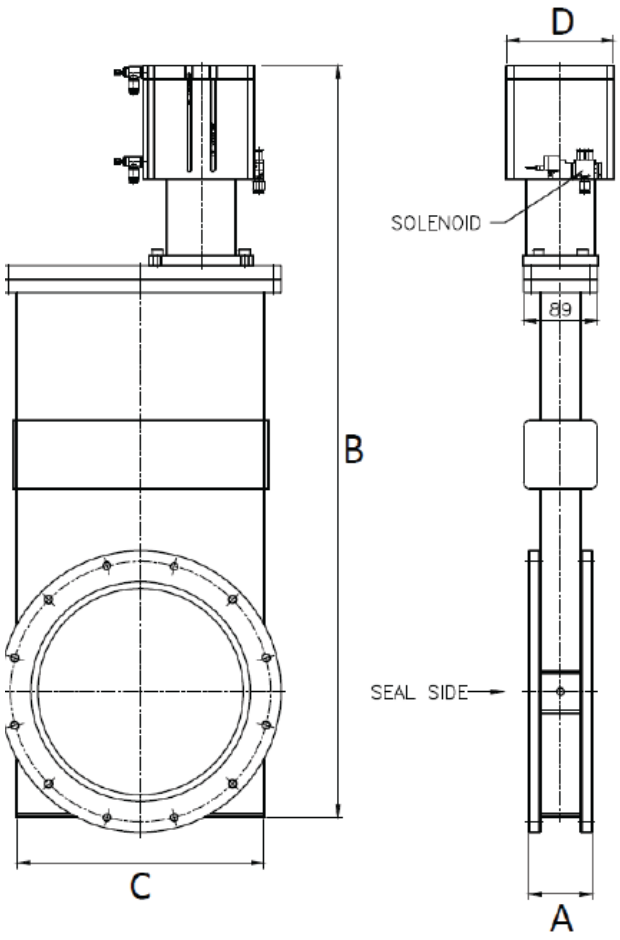
Features & Benefits

1. Enhanced cycle life of 250,000 times before the 1st service.
2. Easy maintenance with Repair Parts Kit available.
3. Applications for the Semiconductor, Solar, OLED Industries, etc.
4. Customizations available such as Lock Function, Speed Controller, Shielded Gate, or Heater Jacket, etc.

Specifications

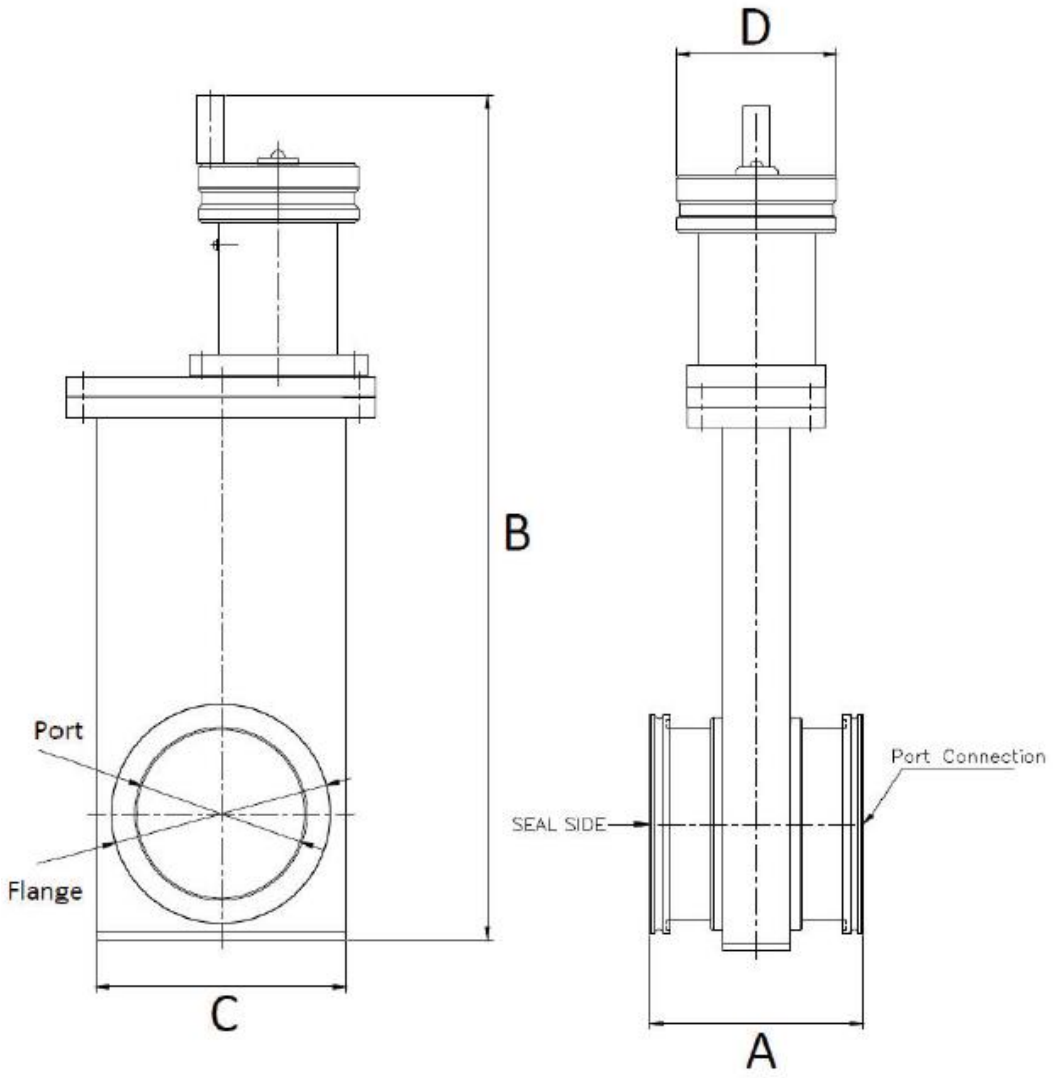
GATE SEAL TYPE	GATE VALVE
Operation	Manual / Pneumatic
Flange Size (ID)	1 5" ~ 14" (Larger sizes available upon request)
Flange Type	KF, ISO, JIS, ASA, CF
Feedthrough	Welded Bellows
Gate Seal	Viton O-Ring / Kalrez O-Ring / EPDM
Bonnet Seal	Viton O-Ring (HV) / Cu Gasket (UHV)
Response Time	≤ 2 sec
Operate Pressure Range	1 5" ~ 6" : $1x10^{-10}$ mbar to 1400 mbar 8" ~ 14" : $1x10^{-10}$ mbar to 1200 mbar
Differential pressure at opening	≤ 30 mbar
Differential pressure on the gate	1 5" ~ 6" : ≤ 1400 mbar / 8" ~ 14" ≤ 1200 mbar
Leak rate	< $1x10^{-10}$ mbar l/sec
Cycles until first service	250,000 (HV) & 200,000 (UHV)
Temperature for Valve Body	≤ 200 °C (HV) & ≤ 250 °C (UHV)
Temperature for Actuator	≤ 80 °C (HV) & ≤ 150 °C (UHV)
Bake Temperature	≤ 150 °C (HV) & ≤ 200 °C (UHV)
Materials	Body (Stainless Steel304 or 316L) / Actuate (Al 6061Anodizing)
Mounting Position	Any
Operating Pressure (N2)	4 ~ 7kgf/cm^2

Outline Dimensions



Pneumatic, CF Flange			Dimension in mm	
Size (ID)	A	B	C	D
1.5"	52.4	257.0	69.5	58.0
2.0"	72.5	334.5	99.5	68.0
2.5"	67.5	334.5	99.5	68.0
3.0"	64.0	489.5	140.0	68.0
4.0"	80.0	489.5	148.0	64.0
6.0"	86.0	596.5	190.0	77.0
8.0"	86.0	743.0	239.0	94.0
10.0"	104.0	903.0	294.0	124.0
12.0"	105.6	1066	368	140
14.0"	115.6	1208	426	159

Outline Dimensions



Manual, CF Flange				Dimension in mm
Size (ID)	A	B	C	D
1.5"	52.4	268.7	69.5	65.0
2.0"	72.5	331.7	99.5	64.0
2.5"	67.5	331.7	99.5	64.0
3.0"	64.0	489.5	140.0	68.0
4.0"	80.0	500.7	148.0	95.0
6.0"	86.0	584.2	190.0	95.0
8.0"	86.0	721.5	239.0	99.0
10.0"	104.0	870.7	294.0	110.0