# PNEUMATICALLY OPERATED GATE VALVES

ADVANCED Technologies

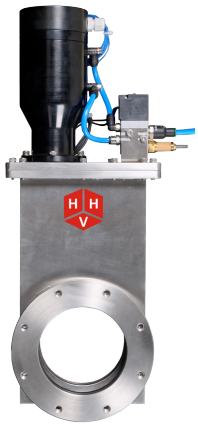
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## HHVAT's pneumatically operated Gate Valves come in two or three position options

### TWO POSITION PNEUMATICALLY OPERATED GATE VALVE

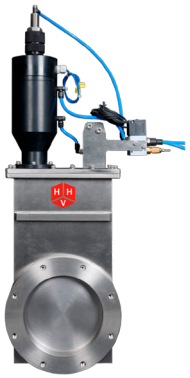


Valve closed view

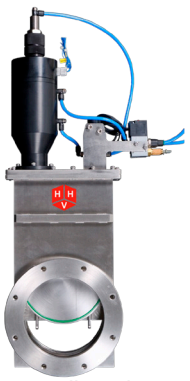


Valve open view

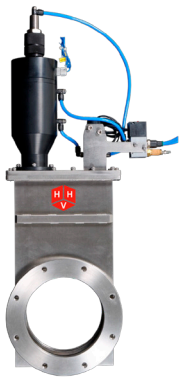
### THREE POSITION PNEUMATICALLY OPERATED GATE VALVE



Valve closed view



Intermediate view



Valve open view

The three position gate valves combines both throttling and isolation. It facilitates to fully open and an adjustable third position with user defined set points.

### ADVANTAGES

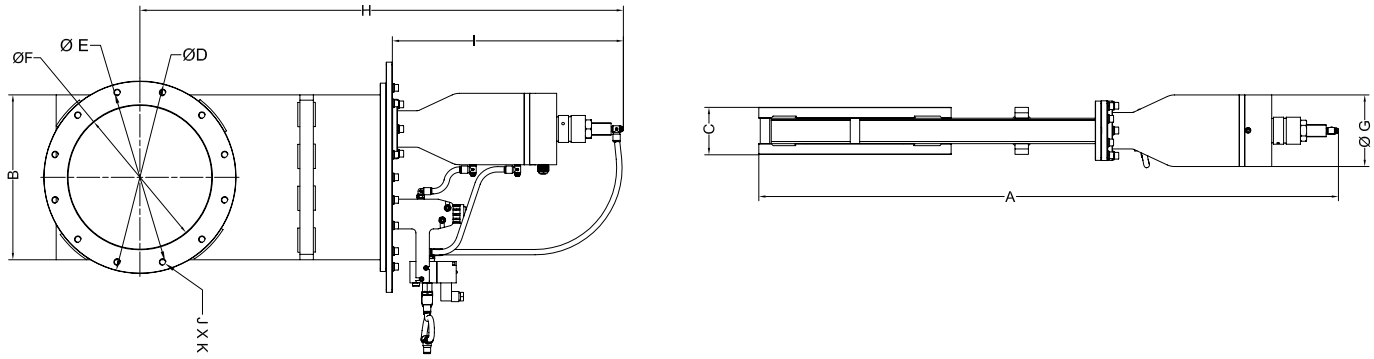
- The compact design reduces space and volume needed for the valve
- Reduction of volume decreases out-gassing and pump down time
- 1,00,000+ cycles before maintenance for most applications
- Carriage and solenoid can be serviced without removing the valve from the system
- Unique air cylinder design reduces vibrations during cycling for semiconductor and other sensitive processes

### FEATURES

- Made up of nonmagnetic stainless steel (SS-304)
- Compact design with minimal interior surface area
- Easy maintenance without removing valve from the system and high life cycle
- Available as ISO and CF flanges
- Bellow sealed valve body for high vacuum application
- Electropneumatic actuation with reed switch position indicator
- Solenoid valve control with manual override

Pneumatically operated gate valves from HHV Advanced Technologies are designed for reliability and unparalleled flexibility, making them ideal for use as in-line isolation valves and in load lock applications.

## DIMENSIONAL VIEW OF GATE VALVE




| Flange (mm) | A | B | C | D | E | F | G | H | I | J | K |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ISO - 100 | 473.7 | 146 | 60 | 165 | 145 | 102 | 80 | 391.7 | 176.7 | M8 | 8 |
| ISO - 160 | 574.2 | 191.8 | 68.2 | 225 | 200 | 153 | 91 | 476.8 | 192.8 | M10 | 8 |
| ISO - 200 | 745.5 | 244.3 | 70.2 | 285 | 260 | 213 | 106 | 613 | 229 | M10 | 12 |
| ISO - 250 | 874.5 | 304.5 | 83 | 335 | 310 | 254 | 120 | 707 | 234 | M10 | 12 |

## STANDARD TECHNICAL SPECIFICATIONS

- Body material: Stainless Steel
- Sealing: Gate sealing: Viton 'O' ring
- Actuator to valve body: SS 304 flexible
- Vacuum: Pressure Range - $1\times10^{-9}$ mbar
- Helium leak rate: < $1\times10^{-9}$ mbar.lit/sec
- Mounting Position: Any
- Pneumatic air service: 6 bar
- Mechanism: Position indicator reed switch: 24V DC
- Solenoid: Two position-spring return, 24V DC, 50/60 Hz

## APPLICATIONS

- General purpose valve for isolation in high vacuum systems
- Valving operation for Cryo pumps, Turbo molecular pumps, Ion pumps and Diffusion pumps
- Used for semi-conductor, scientific and high technology industries which require sensitive and vibration free valving operation
- Used for automated process applications


HHV ADVANCED Technologies

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