



IMPROVING PRODUCTIVITY

of Vacuum Processes



BEST-IN-CLASS
Vacuum Control Solutions

COMMITMENT

Committed to delivering high-performance vacuum control solutions for more than 50 years, MKS Instruments remains focused on providing solutions that allow you to continuously improve the performance and productivity of your tools and equipment. Our innovative solutions for vacuum control are backed by our relentless focus on operational excellence to ensure your success. From sales to technical support experts around the globe, we strive to maintain a high level of customer responsiveness to ensure you get the product you need, when you need it. MKS has your vacuum valve needs covered.



... Delivering High-



NEW! R SERIES GATE VALVES

High-performance, cost-effective solutions ideal for isolation of roughing pumps and roughing lines for semiconductor and general vacuum applications. A range of options include pneumatic and manual actuators with elastomer shaft seal design, lock out tag out capability, limit switches, and solenoids.

Advantages

High Performance Heating Option

- Excellent temperature uniformity ensures no cold spots on internal surfaces
- Prevents condensation of effluents and corrosive gases

High Reliability and Long Cycle Life

- DN80 and DN100 > 200,000 cycles
- DN160 > 100,000 cycles

Flexible Sizing and Configurations

- Stainless steel and aluminum versions
- DN80, DN100, and DN160mm sizes

High-performance Valve Solutions



VACUUM ISOLATION VALVES

Reliable, well-designed isolation valve solutions address a wide range of vacuum and semiconductor applications. An extensive portfolio of isolation valve solutions includes 17 different types of valves, ranging in size from ¼" fittings up to 10" (NW250) in both angle and inline configurations.

Advantages

Addressing Diverse Applications

- Gauge and chamber isolation
- Diagnostic isolation
- High cycle capabilities for load lock chambers
- Specially designed corrosion-resistant valves for aggressive processes
- Rapid actuation

Broad Selection of Options and Configurations

- Pneumatic, manual, and electromagnetic operation
- Adjustable conductance control using interchangeable orifices and metering devices
- Customization to meet your needs and specific applications



PRESSURE CONTROL VALVES

Intelligent, integrated solutions provide precise control in difficult CVD processes and general vacuum applications. Unique design is ideal for applications demanding high performance and simple integration into process tools. All control, communication, and driver circuits within the throttle valve assembly eliminate the need for mounting a separate electronics module. Available with multiple I/O configurations, including EtherCAT®, DeviceNet™, RS232, and Analog/ TTL.

Advantages

PID and Model-based Control Algorithms

- Superior pressure control performance

High Torque

- Consistent performance and extended uptime in harsh deposition processes

Non-Sealing and Low Conductance Flapper Options

- Suitable for "house exhaust" or atmospheric applications

Committed to Your Success



PRODUCT TECHNOLOGY

Over 700 R&D engineers and scientists with industrial manufacturing know-how developing sophisticated technology solutions to advance manufacturing in the 21st Century and beyond.

Fact: 1,500 Patents worldwide | 600+ Patents pending



LEAN MANUFACTURING

Central to our culture is a relentless focus on continuous improvement to ensure you, our customers, receive the highest quality products, right when they're needed.

Fact: 50+ Years devoted to delivering the highest value to our customers



TRUSTED SERVICE & SUPPORT

Global network of hundreds of applications engineers, technical specialists, and service engineers with domain and industry expertise to address your unique requirements.

Fact: Global Reach—Local Focus in 60+ countries worldwide

CONTACT US



MKS Instruments, Inc. is a global provider of instruments, subsystems and process control solutions that measure, control, power, monitor and analyze critical parameters of advanced manufacturing processes to improve process performance and productivity. Our products are derived from our core competencies in pressure measurement and control, materials delivery, gas composition analysis, control and information technology, power and reactive gas generation, vacuum technology, photonics, lasers, optics and motion control. Our primary served markets are Semiconductor, Industrial Technologies, Life & Health Sciences, and Research & Defense.

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