

MODEL 450

Vacuum Regulator

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Vacuum Regulation Made Easy

Simple in Form and Function

- Regulator is a self-contained, vacuum level control unit for maintaining pressures between 2 and 760Torr.
- Works in conjunction with a precision isolated transducer and a proportional solenoid valve to measure and control vacuum.
- It is super simple to use: simply dial in the pressure to be maintained and it takes care of the rest.

Maximizes Pump Down Speed

- Designed with a much larger bore (9/32") proportional valve (compared to alternatives) that allows the controller to make precise changes in vacuum flow to achieve a very stable vacuum level.
- Has a bleed valve that adds bleed control from atmospheric air, or customer supplied gas.

Don't Worry/Automate

- Reads current system vacuum via an isolated transducer, and compares that reading to the desired vacuum setpoint.
- Microprocessor runs an intelligent algorithm drives a proportional valve using a PWM technique, which allows precise positioning of valve without developing excessive heat or generating EMI (electromagnetic interference).
- Constantly monitors system pressure and readjusts valve orifice to maintain desired target pressure, even in vessels with dynamic gas loads or changing setpoints.

Increase Pump Longevity

- Its utilizes the downstream vacuum control method (throttling the pump) which increases pump longevity by keeping the pump operating closer to its base vacuum pressure.
- Ideal for altitude simulation, distillations, composites research and Industrial vacuum processes where repeatability can be translated into better experiments or product yield.

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Features:

- Easy dial control
- Backlight for night viewing
- Field calibratable
- Made in USA
- Precise vacuum regulation in the 2-750 Torr range
- Fast convergence
- Factory calibrated
- Control remotely via RS232/USB



Specifications:

- Range: 1-760 Torr
- 3/8" I.D. hose barb for main vacuum flow
- 775i piezo resistive isolated sensor; capacitive manometer upon request
- Dimensions: 2.75" x 5.5" x 7.5"
- Power: 110 V wall outlet

Accuracy:

+/- 2 Torr 1-760 Torr

Options:

- External capacitance monometer
- External valves
- NIST calibration
- Differential pressure control
- Stainless fittings

Diagrams:

