

# Model 329SR Vacuum Regulator (Self-Relieving)



## APPLICATION

The Model 329SR is a precision, high-flow capacity (12.5 SCFM) vacuum regulator which is a self-relieving design, meaning it has the ability to vent excess vacuum when adjusting from greater to lesser vacuum levels. This regulator is ideally suited to control vacuum in applications that have no leakage into the system and where it is desirable to have excess vacuum automatically vented instead of providing an atmospheric vent to relieve trapped vacuum when adjusting from a higher to lower vacuum setting. Such applications include vacuum leak test equipment, precision vacuum clamping, calibration and instrumentation, altitude simulation chambers, and general laboratory applications. The regulator installs in series between the volume being controlled and the vacuum pump or central vacuum supply line so any number of regulators can be adjusted to different vacuum settings while connected to a single vacuum source. Three different model variations are available which provide optimized performance according to the vacuum operating range required. Low differential vacuum models allow for vacuum settings close to atmospheric pressure. Higher vacuum applications with vacuum settings close to perfect vacuum (low absolute pressure) are served by the high differential model.

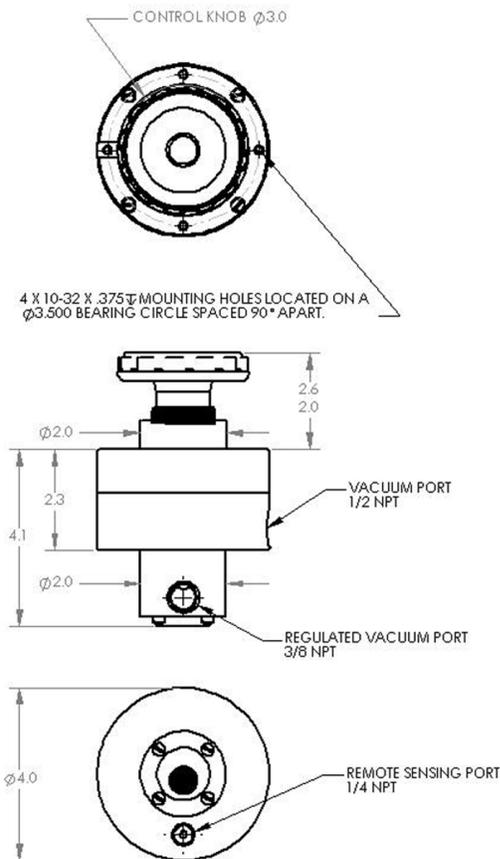
Normal Operating Mode	Minimum Differential Vacuum	Minimum Absolute Pressure	Model Number Absolute Reference	Model Number Atmospheric Reference
Standard	1.50 in. Hg (38.10 mm Hg)	0.30 in. Hg (7.62 mm Hg)	329SR 329SR-500	329DPSR 329DPSR-500
1.50 in. Hg (38.10 mm Hg)	0.30 in. Hg (7.62 mm Hg)	0.40 in. Hg (10.16 mm Hg)	329SRL 329SRL-500	329DPSRL 329DPSRL-500
0.30 in. Hg (7.62 mm Hg)	3.00 in. Hg (76.20 mm Hg)	0.20 in. Hg (5.08 mm Hg)	329SRH 329SRH-500	329DPSRH 329DPSRH-500

## OPTIONS

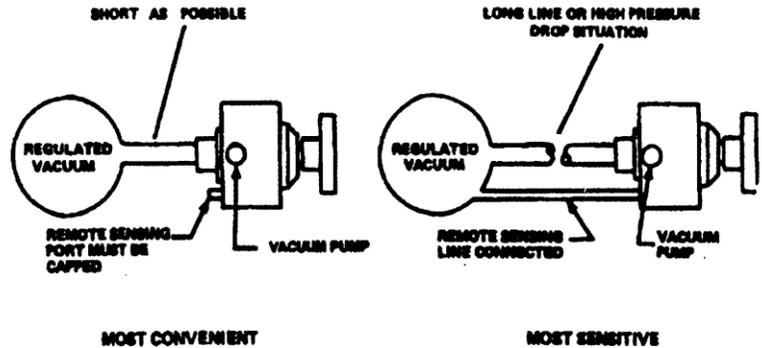
**Absolute Pressure Reference** controls vacuum relative to absolute pressure, whereby zero pressure is achieved at perfect vacuum. An absolute reference is most commonly used in laboratory, calibration, altitude simulation, distillation, and vapor pressure control and other applications requiring absolute pressure control.

**Atmospheric Pressure Reference** controls vacuum relative to the ambient atmospheric pressure. It is highly desirable to use in applications where precise control of vacuum relative to atmospheric pressure is required, since it compensates for changes in barometric pressure. The atmospheric pressure reference option is ordered by adding the letters "DP" after 329 in the part number. For example 329DPSR or 329DPSRL for low differential vacuum operation.

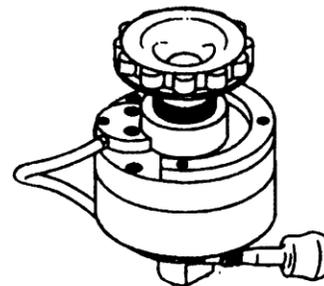
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## INSTALLATION SCHEMATIC



## 329-500 WITH REMOTE FILTER



## SPECIFICATIONS

Flow Passage at full flow:

0.48 in. diameter (12.5 SCFM)

Adjustability Range:

From 0.3 in. Hg below atmospheric pressure to near-zero absolute pressure over 13-turns of control knob

Hysteresis:

Approximately 0.004 in. Hg (0.1 mm Hg)

Flow Sensitivity:

Flow variation from 0 to 350 liters per minute with setpoint shift less than 0.1 in. Hg

Port Connection:

1/2-inch female NPT vacuum supply, 3/8-inch NPT regulated outlet

Weight:

3.6 lb (Model 329-500- 3.9 lb)

### MODEL 329SR-500 (329SR with Remote Filter)

Remote filter protects vacuum regulator's ambient breather vent from contamination when operating in dusty environments.

Quick-disconnect fitting provides for easy field replacement of filter element.

Standard Model 329SR can be converted in the field using available Filter Kit (Part Number 329-300).