# PRESSURE VOLUME CONTROLLERS 

## Vacuum to 1000 or Vacuum to 3000 psi

## AVC-1000 and AVC-3000

AVC-1000, shown smaller than actual size.


OMEGA ${ }^{\circledR}$ pressure volume controllers provide an easy means of rapidly and accurately adjusting the pressure in a closed system to within 0.00025 psi. They can be used with digital pressure gauges, dial gauges, transducers, pressure switches, air deadweight testers, manometers, and similar devices. OMEGA ${ }^{\circledR}$ pneumatic controllers are available for use with pressures up to 3000 psi.
Engineered to provide superior performance and safety, these devices incorporate a unique pressure balance valve. This valve is opened during initial system pressurization. When opened, the valve provides equal pressure to both sides of the piston assembly (see Figure 1). After the system has been pressurized, the valve is closed. Once the valve is closed, a change in piston position will change the pressure within the system. Simply turning the large pressure adjust knob repositions the piston to increase or decrease the pressure.

Equalization of pressure on both sides of the piston ensures ease of pressure setting. In addition, the valve performs a safety function. The balance valve will open automatically if an excessive pressure differential is generated across the piston. In essence, the valve serves as a safety relief valve and protects the controller from damage due to excessive pressure differentials within the unit.


| SPECIFICATIONS | TO Orier |  |
| :--- | :--- | :--- |
|  | MODEL NO. |  |
|  | AVC-1000 | AVC-3000 |
| Range (psi) | Vacuum to 1000 | Vacuum to 3000 |
| Proof (psi) | 2000 | 6000 |
| Burst (psi) | 6000 min | $12,000 \mathrm{~min}$ |
| Resolution (psi) | 0.00025 | 0.0005 |
| Volume Change (Cubic Inches) | $57.35 \mathrm{~mL}(3.5$ cubic in) | 40.97 (2.5 cubic in) |
| Mechanical Rotation (Total Turns) | 31 | 61 |
| Connection (Female) | $1 / 8$ NPT | $1 / 8$ NPT |
| Operating Temp Range | -18 to 49 ${ }^{\circ} \mathrm{C}$ (20 to $\left.120^{\circ} \mathrm{F}\right)$ |  |
| Construction | Aluminum body, stainless steel, brass, <br> PTFE, Acetal and Buna-N |  |

## Comes complete with operator's manual.

Ordering Example: AVC-1000, pressure volume controller, vacuum to 1000 psig.

