

# Pressure Controllers



Responsive and stable pressure control  
in milliseconds



Dual valve controllers offer  
novel capabilities





PC Single-valve pressure controllers



PCD Dual valve controller proportionally controls exhaust and minimizes waste from bleed valves



PC3 With a remote sense port, control pressure anywhere in your system



PCR High flow controllers feature frictionless proportional Rolamite valves



PC-EXTSEN

Connecting to an external sensor with serial/analog works well with vacuum or distant volumes. Can also be configured as dual valve for differential pressure control.



P Gauge

Electronic pressure gauge with useful Alicat features, like digital display and communications protocols

# Pressure Controllers

Rock-steady control in an instant.

## Better Control

- 50-100 ms control response
- Tunable PID control loop
- Dual valve system minimizes wasted gas with fast, stable, proportionally controlled exhaust
- Control pressure at any point in system with remote sense port
- Customizable valves
- Control at variable flow rates

## Quick Specs

- **Accuracy:** 0.25% (NIST-traceable). **High accuracy:** 0.125%.
- **Repeatability:** 0.08% of reading.
- **Operating ranges:** 0.5% to 100% Full Scale (200:1 turndown ratio).
- **Communications:** Analog and serial on every device
- **Lifetime Warranty**

## Accessory and Customization Options



PCD-PSID-RD

- **Optional remote displays**
- **Remote electronics option:** separate the electronics package from the flow body.

- **Connection hub:** BB9 Box for talking to multiple units over serial communication.
- **Software:** Flow Vision SC programs and monitors controllers from a computer
- **CSA and ATEX:** for operating in hazardous environments
- **Cables** of many types. Connect controller to a computer USB serially
- **International power supplies**
- **Industrial communications:** [EtherNet/IP](#), [DeviceNet](#), [PROFIBUS](#), or [Modbus](#)

## Selected Applications



### Filter Characterization

Characterize a filter's flow versus pressure drop curve by fixing the differential pressure across the filter using the pressure controller. The mass flow meter displays the resulting flow rate at a given pressure drop. **More online ...**



### Faster Leak Checking

Establish stable pressure for the leak check by measuring pressure precisely at the device under test with Alicat's PC3-series pressure controller with remote sense port. This method negates the pressure drop induced by the mass flow meter that is measuring the leak rate. **More online ...**

**See additional topics online:** Fluid dispensing using pressure control

- Dead-ended pressure control with remote sensing port
- Vacuum coating with pressure control