

## Technical Data for Dual Valve Pressure Controllers

The following specifications are for the standard configuration of the Alicat product as shipped from the factory. There are many low-cost customization options available.

### Operating Specifications

Specification	PCD Series	Description
Full scale pressure < 2" H2O Accuracy	Consult Factory	Full Scale
Full scale pressure ≥ 2" H2O Standard Accuracy	± 0.25%	Full Scale
Full scale pressure ≥ 2" H2O High Accuracy Option	± 0.125%	Full Scale
Feed Valve Orifice	0.050	Inches
Exhaust Valve Orifice	0.050	Inches
Alternate Valve Orifices Available	0.010 or 0.030	Inches
Repeatability	± 0.08%	Full Scale
Turndown Ratio	200:1	
Adjustable Response Time <sup>1</sup>	≤100	Milliseconds
Operating Temperature	-10 to +50	Degree Celsius
Zero Shift	0.02%	Full Scale / °Celsius
Span Shift	0.02%	Full Scale / °Celsius
Excess Pressure	102.4% Controllable	Full Scale
Burst Pressure	≥3X	Full Scale
Supply Current Peak	0.250	Amp
Supply Current Average	0.050	Amp
Supply Voltage	12 – 30	Volts dc
Input /Output Signal Standard	RS-232 Serial & 0-5Vdc or PROFIBUS <sup>2</sup>	
Electrical Connections	8 Pin Mini-DIN or DB-15	
Wetted Materials <sup>3</sup>	302 & 303 Stainless Steel, Viton®, Silicone RTV, Brass, 400 Series Stainless Steel (standard units are for non-corrosive gases), Silicon, Glass.	

1. Volumes, feed pressures, exhaust pressures and line sizing will determine the limits of response times.
2. If selecting PROFIBUS no analog signal is available. PROFIBUS units do not have the display. See PROFIBUS specifications for PROFIBUS supply voltages and currents. Please contact Applications Assistance for PCD - PROFIBUS options.
3. If your application demands a different material, please contact Application Assistance for available options.

### Mechanical Specifications

PCD Series Dual Valve Controller	Mechanical Dimensions	Process Connections <sup>1</sup>
All Standard Ranges	4.1"H x 4.8"W x 1.1"D	1/8" NPT Female

1. Compatible with Swagelok® tube, Parker®, face seal, push connect and compression adapter fittings.

### Standard Available Ranges

PCD Series Pressure Controllers		
-15PSIG to 0PSIG		
2inH <sub>2</sub> OD	2inH <sub>2</sub> OG	
4inH <sub>2</sub> OD	4inH <sub>2</sub> OG	
1PSID	1PSIG	
5PSID	5PSIG	
15PSID	15PSIG	15PSIA
30PSID	30PSIG	30PSIA
100PSID	100PSIG	100PSIA
150PSID		300PSIA
Other ranges available. Please contact Application Assistance.		

Select One Unit of Measure when Ordering		
PSIA	inHG	Atm
PSIG	inH <sub>2</sub> O	Torr
mmHG	mBar	kPa