

Technical Data for **PC, PC3, PCR, and PCR3** Single Valve Pressure Controllers

Tel: 888-290-6060
www.alicat.com/pressure

Alicat PC-Series pressure controllers allow the precise control of absolute, gauge or differential pressure. These units can be configured for vacuum pressure or backpressure control.

PCR-Series pressure controllers are best for flows greater than 20 lpm.

PC3 and PCR3-Series pressure controllers are fitted with an external pressure port for sensing and controlling pressures at a remote point in the system.

Standard Specifications (Contact Alicat for available options.)

Performance	PC & PC3 Controllers	PCR & PCR3 Controllers
Full scale pressure < 2" H2O Accuracy	Consult Factory	
Full scale pressure ≥ 2" H2O Standard Accuracy	± 0.25%	
Full scale pressure ≥ 2" H2O High Accuracy Option	± 0.125%	
Repeatability	± 0.08% Full Scale	
Zero Shift and Span Shift	0.02% Full Scale / °Celsius	
Operating Range / Turndown Ratio	0.5% to 100% Full Scale / 200:1 Turndown	
Excess Pressure	102.4% FS Controllable	
Burst Pressure	3 X Full Scale	
Typical Response Time ¹	100 ms (Adjustable)	
Warm-up Time	< 1 Second	
1. Volumes, feed pressures, exhaust pressures and line sizing will determine the limits of response times.		

Operating Conditions	PC & PC3 Controllers	PCR & PCR3 Controllers
Gas Compatibility	Compatible with all non-corrosive gases ¹	
Operating Temperature	-10 to +60 °Celsius	
Common Mode Pressure (Differential Pressure Units Only)	150 psig	
Mounting Attitude Sensitivity	None	
Valve Type	Normally Closed	
Ingress Protection	IP40	
Wetted Materials	400 Stainless Steel, 302 & 303 Stainless Steel, Viton®. Silicone RTV, Silicon, Glass. PC & PC3 Only Add: Brass If your application demands a different material, please contact Alicat.	
1. For aggressive gases, please see our PCS and PCRS-Series pressure controllers. For use with water or other liquids please contact Alicat		

Communication / Power	PC & PC3 Controllers	PCR & PCR3 Controllers
Monochrome LCD or Color TFT Display with integrated touchpad	Displays Pressure	
Digital Input / Output Signal ¹ Options	RS-232 Serial / RS-485 Serial / Modbus / PROFIBUS ³	
Analog Input / Output Signal ² Options	0-5 Vdc / 1-5 Vdc / 0-10 Vdc / 4-20 mA	
Optional Secondary Analog Input/Output Signal ²	0-5 Vdc / 1-5 Vdc / 0-10 Vdc / 4-20 mA	
Electrical Connection Options	8 Pin Mini-DIN / 9-pin D-sub (DB9) / 15-pin D-sub (DB15) / 6 pin locking	
Supply Voltage	12-30 Vdc (15-30 Vdc for 4-20 mA outputs)	24-30 Vdc
Supply Current	0.250 Amp	0.750 Amp
1. The Digital Output Signal communicates Pressure 2. The Analog Output Signal and Optional Secondary Analog Output Signal communicate Pressure 3. If selecting PROFIBUS , no analog signal is available. PROFIBUS units do not have the display. See PROFIBUS specifications for PROFIBUS supply voltages and currents. (www.alicat.com/profibus)		

Mechanical Specifications

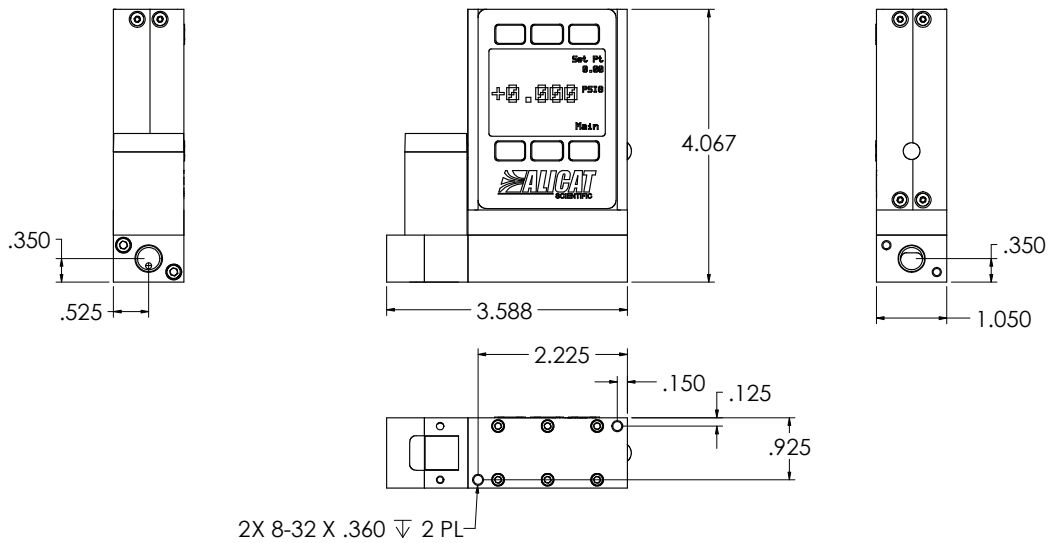
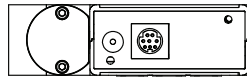
Pressure Product	Mechanical Dimensions	Process Connections ¹
PC & PC3 Controllers	4.1"H x 3.6"W x 1.1"D	1/8" NPT Female
PCR & PCR3 Controllers	5.5"H x 2.9"W x 5.5"D	3/4" NPT Female
1. Compatible with Beswick®, Swagelok® tube, Parker®, face seal, push connect and compression adapter fittings. VCR and SAE connections upon request.		

Standard Available Ranges

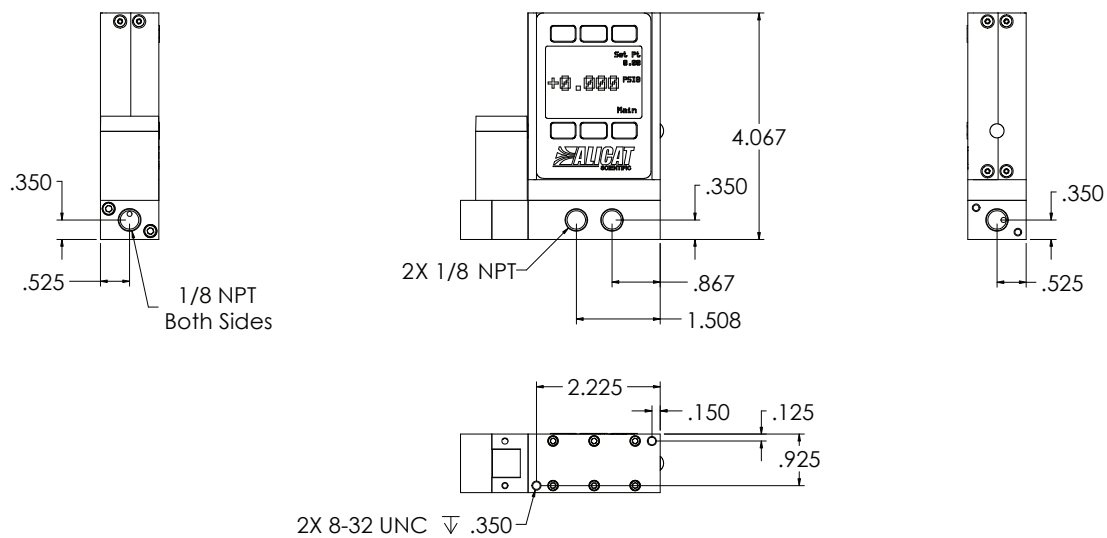
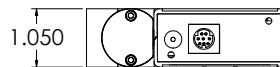
PC, PC3, PCR & PCR3 Controllers		
-15 psig to 0 psig		
2 inH ₂ OD	2 inH ₂ OG	
4 inH ₂ OD	4 inH ₂ OG	
1 psid	1 psig	
5 psid	5 psig	
15 psid	15 psig	15 psia
30 psid	30 psig	30 psia
100 psid	100 psig	100 psia
150 psid	300 psig	300 psia
	500 psig	500 psia
Other ranges available. Please contact Alicat.		

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

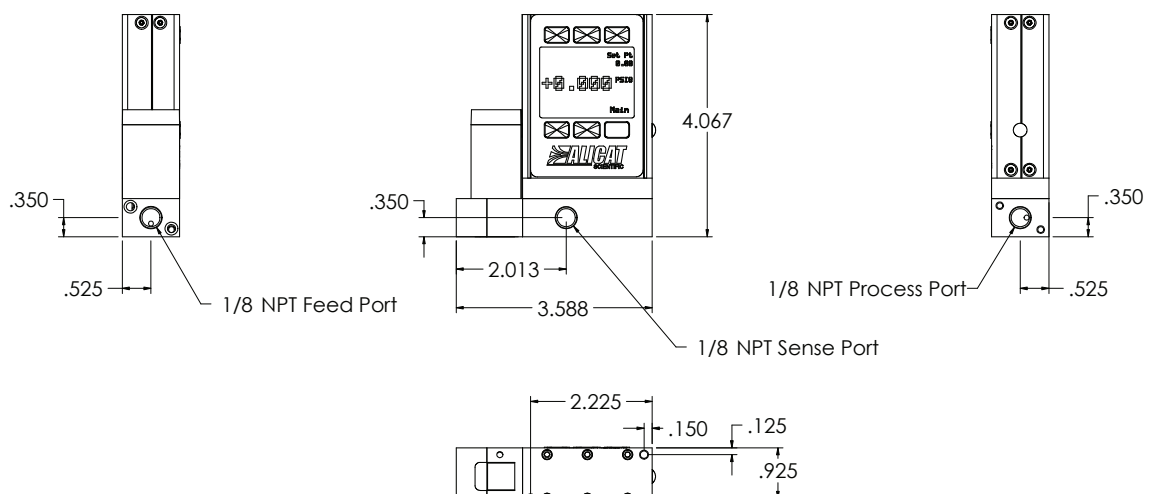
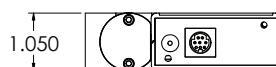
PC-Series
All standard ranges



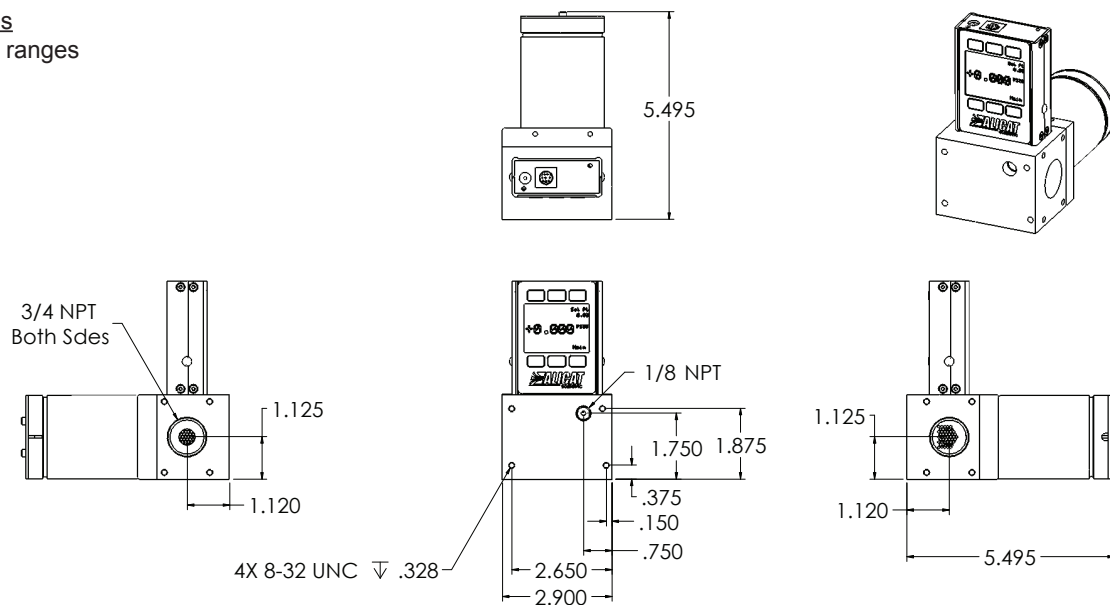
PC-Series
Differential Pressure
All standard ranges



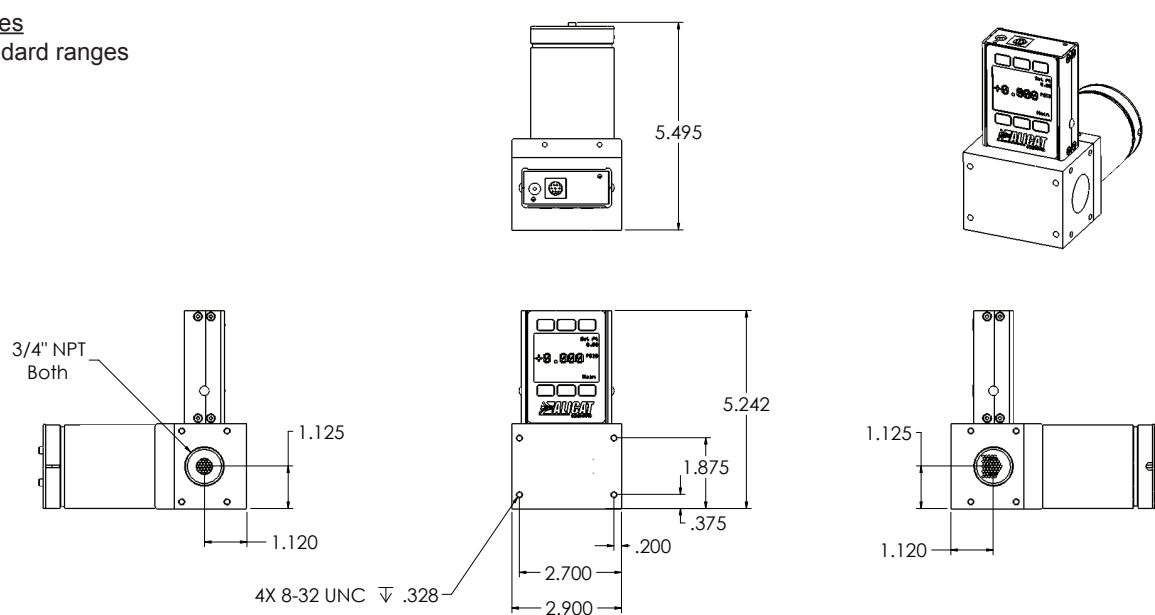
PC3-Series
All standard ranges



PCR3-Series
All standard ranges



PCR-Series
Most standard ranges



PCR-Series
Differential Pressure 5 inH2O

