Technical Data for EPC and EPCD-Series Pressure Controllers

1–100 PSI OEM single-valve and dual-valve controllers for absolute and gauge pressure

Standard specifications. Consult Alicat for available options.

SENSOR AND CONTROL PERFORMANCE						
Accuracy at calibration conditions ¹	±0.125% of full scale					
Repeatability (2σ)¹	±0.08% of full scale					
Steady State Control Range	0.01–100% of full scale					
Typical Control Response Time ²	As fast as 50 ms, user adjustable					
Valve Function	Normally closed					
Temperature Sensitivity ³	Zero shift: 0.02% full scale per °C from tare temperature Span shift: 0.02% full scale per °C from calibration temperature					
Operating Temperature Range	−10–60°C					
Burst Pressure	3× full scale					
Sensor Response Time	<1 ms					
Typical Indication Response Time	<10 ms					
Typical Warm-Up Time	<1s					

¹ Repeatability is included in the accuracy statements.

³ Tare is not available on absolute pressure devices.

MECHANICAL						
Gas Compatibility ⁴	Compatible with non-corrosive gases					
Mounting Attitude Sensitivity	le Sensitivity None					
Mounting Options	2× through holes accepting #4 cap head screws and 2× 4-40 UNC tapped holes with a depth of 0.200" [5.08 mm]					
Humidity Range	0–95%, non-condensing					
Wetted Materials	302 and 430FR stainless steel, aluminum, FKM, alumina ceramic, glass, gold, heat-cured epoxy, heat-cured silicone rubber, nickel plated brass, polyamide, silicon nickel plated brass, polyamide, silicon					
Process Connection ⁵	EPC and EPCD inlet and outlet: 1/2" NPT female EPCD exhaust: M5×0.8 female					

⁴ For aggressive gases, please see our PCS-Series pressure controllers. Verify compatibility with wetted materials. For use with water and other liquids, please contact Alicat.

⁵ Additional process connection options are available. Contact Alicat for more information.

STANDARD AVAILABLE RANGES								
Pressure Range Unit 1 PSI 5 PSI 15 PSI 30 PSI 100 PSI								
Absolute Pressure			4	1	✓			
Gauge Pressure	4	4	1	4	✓			

COMMUNICATIONS						
Analog I/O Options	0–5 Vdc, 1–5 Vdc, 0–10 Vdc, 4–20 mA					
Digital I/O Options	RS-232 serial by default RS-485 serial, Modbus RTU (over RS-232 or RS-485 serial)					
Electrical Connection	6-pin Molex® Micro-Fit					
Power Requirements	24 Vdc, 290 mA (12 volt options available, please contact Alicat)					
Digital Data Update Rate	40 Hz at 19200 baud					
Analog Data Update Rate	1 kHz					
Analog Signal Accuracy	±0.1% of full scale additional uncertainty					

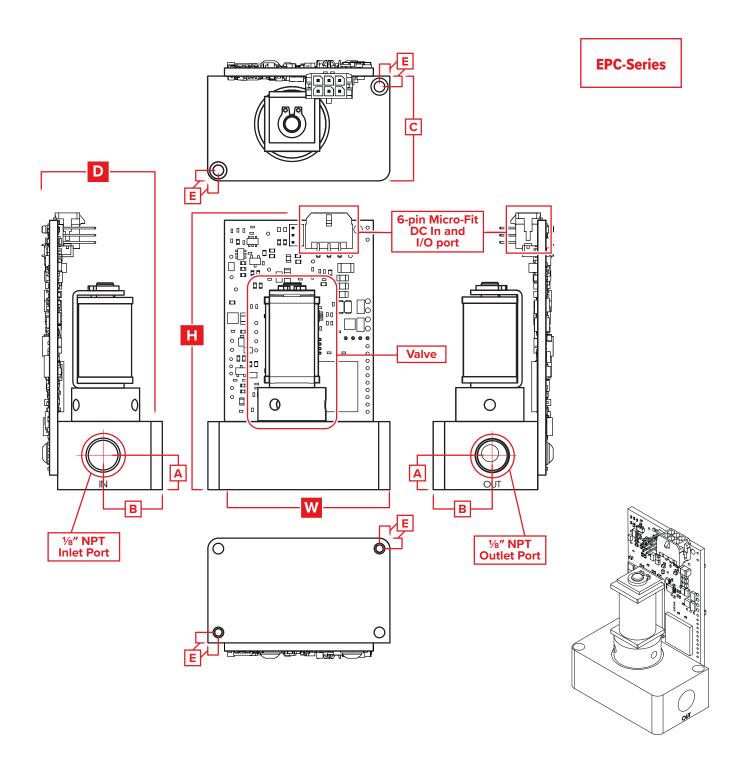
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² Volumes, feed pressures, exhaust pressures, and line sizing will determine the limits of response times.

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DIMENSIONS ⁶								WEIGHT
Series	Height	Width	Depth	А	В	С	E	
EDC	3.041 in	2.000 in	1.322 in	0.375 in	0.650 in	1.150 in	0.115 in	≈ 0.25 lb
EPC	77.24 mm	50.80 mm	33.58 mm	9.53 mm	16.51 mm	29.21 mm	2.92 mm	≈ 0.11 kg

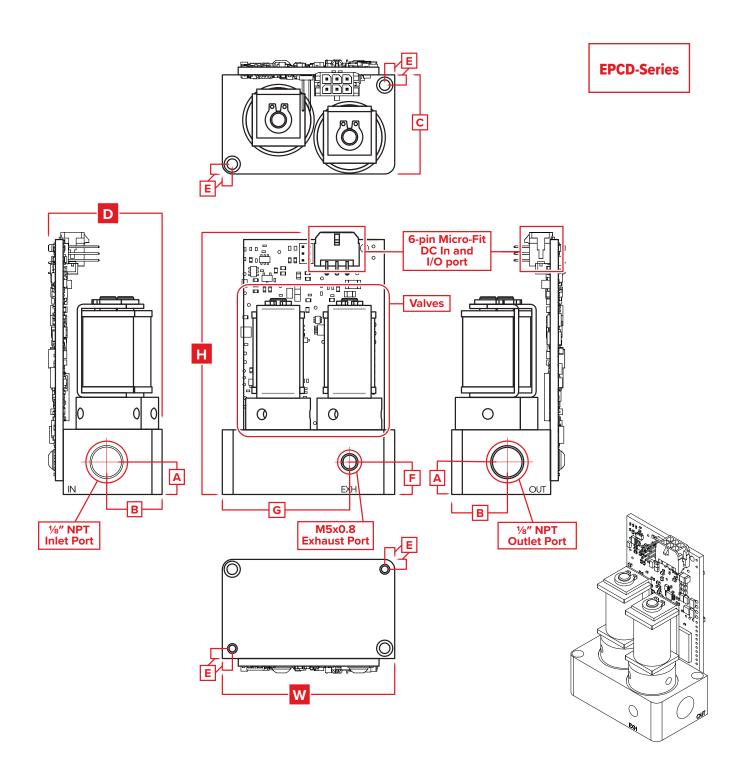
⁶ Port locations and other dimensions may be customized. Contact Alicat for more information.

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Technical Data for EPC and EPCD-Series Pressure Controllers

1–100 PSI OEM single-valve and dual-valve controllers for absolute and gauge pressure

Standard specifications. Consult Alicat for available options.



DIMENSIONS ⁶								WEIGHT		
Series	Height	Width	Depth	A	В	С	E	F	G	
EPCD	3.041 in	2.000 in	1.322 in	0.375 in	0.650 in	1.150 in	0.115 in	0.375 in	1.476 in	≈ 0.48 lb
	77.24 mm	50.80 mm	33.58 mm	9.53 mm	16.51 mm	29.21 mm	2.92 mm	9.53 mm	37.49 mm	≈ 0.22 kg

⁶ Port locations and other dimensions may be customized. Contact Alicat for more information.

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