

Technical Data for **Conductor Series** vacuum controllers

10, 100, 1000, and 1000 & 10 TorrA with single valves and optional remote vacuum sensors

Standard specifications. Consult Alicat for available options.

SENSOR AND CONTROL PERFORMANCE	
Accuracy at calibration conditions ¹	0.5% of full scale
Long Term Zero Stability	0.5% of full scale per year
Steady State Control Range	0.1–100% of full scale
Typical Control Response Time ²	≥50 ms (adjustable)
Valve Function	Normally closed
Temperature Sensitivity	Zero shift: 0.01% full scale per °C from tare temperature Span shift: 0.01% full scale per °C from calibration temperature
Operating Temperature Range	10–50°C
Burst Pressure ³	6 kTorrG (116 PSIG)
Sensor Response Time	2 ms
Typical Indication Response Time	<10 ms
Typical Warm-Up Time	2 hours
Available Pressure Ranges	10, 100, and 1000 single-sensor packages 1000 & 10 TorrA dual-sensor package

¹ Combined linearity, hysteresis, and repeatability.

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

³ Exposure should be short term. Maximum allowed exposure to admissible pressure is 1 hr.

MECHANICAL	
Gas Compatibility ⁴	Compatible with non-corrosive gases
Mounting Attitude Sensitivity	None
Mounting Tap Screw Size	8-32 UNC 0.350 in [8.89 mm]
Ingress Protection	IP40 (consult Alicat for weatherproofing options)
Humidity Range	0–80%, non-condensing
Wetted Materials	302, 303, 304, and 430FR stainless steel, brass, FKM standard, alumina.

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.

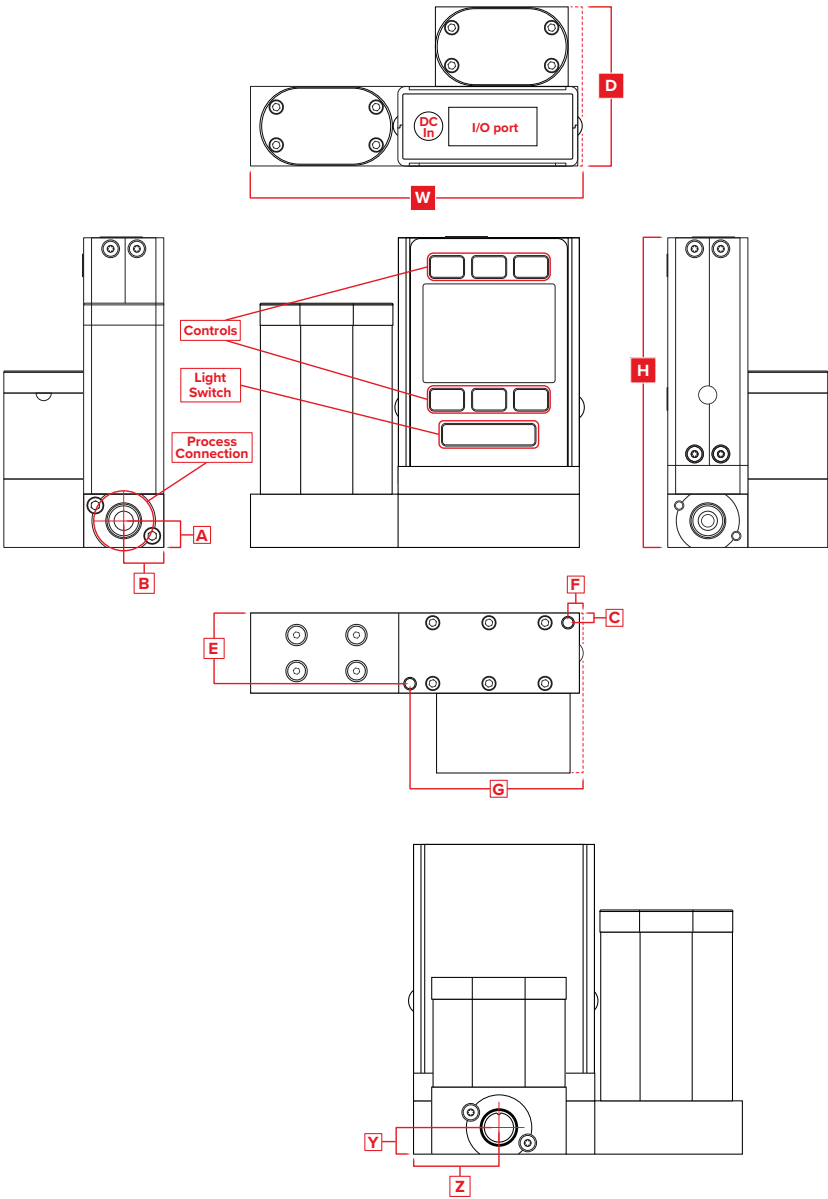
COMMUNICATIONS	
Monochrome LCD or Color TFT Display with integrated touchpad	Simultaneously displays setpoint and pressure
Analog I/O Options	4–20 mA, 0–5 Vdc, 1–5 Vdc, 0–10 Vdc
Digital I/O Options	RS-232 Serial by default RS-485 Serial, Modbus RTU (over RS-232 or RS-485), Modbus TCP/IP, DeviceNet, EtherCAT, EtherNet/IP, Profibus
Electrical Connection Options	6-pin locking, 8-pin mini-DIN, 8-pin M12, DB-9, DB-15 (Contact Alicat for custom pinouts)
Power Requirements ⁵	12–30 Vdc, 250 mA Add 40 mA if equipped with 4–20 mA output
Digital Data Update Rate ⁵	40 Hz at 19200 Baud
Analog Data Update Rate	1 kHz
Display Update Rate	10 Hz
Analog Signal Accuracy	±0.1% of full scale additional uncertainty

⁵ Consult the individual operating bulletins for specific industrial protocol power requirements and data transmission specifications.

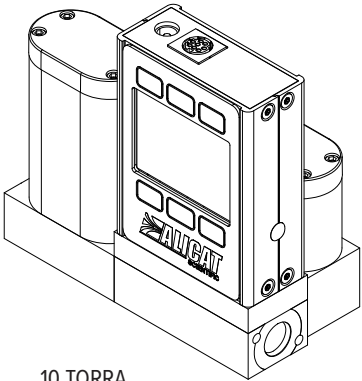
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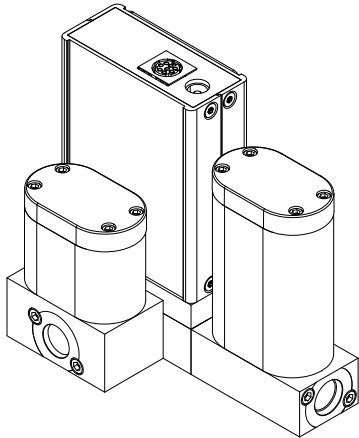
Standard specifications. Consult Alicat for available options.



Representative Examples



10 TORRA



Reverse Side

DIMENSIONS														
	Body				Inlet and Outlet		Mounting Screw Taps				Remote Sense Port ⁶		Inlet and Outlet Port Size ⁶	Remote Sense Port Size ⁶
Label	Weight	Height	Width	Depth	A	B	C	E	F	G	Z	Y	—	—
PC	≈ 1.2 lb	4.068 in	4.320 in	2.100 in	0.350 in	0.525 in	0.125 in	0.925 in	0.150 in	2.225 in	—	—	7/16-20 SAE J1926 Port	7/16-20 SAE J1926 Port
	≈ 0.5 kg	103.33 mm	109.73 mm	53.34 mm	8.89 mm	13.34 mm	3.18 mm	23.50 mm	3.81 mm	56.52 mm	—	—		
PC3	≈ 1.2 lb	4.068 in	4.320 in	2.100 in	0.350 in	0.525 in	0.125 in	0.925 in	0.150 in	2.225 in	1.000 in	0.350 in		
	≈ 0.5 kg	103.33 mm	109.73 mm	53.34 mm	8.89 mm	13.34 mm	3.18 mm	23.50 mm	3.81 mm	56.52 mm	25.40 mm	8.89 mm		

6 Consult Alicat for available process connection options, such as:
 Compression, face seal, push-to-connect, BSPP, NPT, or Swagelok® (including tube, VCO®, and VCR®).