

# Conductor-Series Pressure Controllers

INSTRUMENTS FOR PRECISE VACUUM CONTROL



*1000:1  
operation range*

*NIST-traceable  
±0.5% full scale accuracy*

*Fast valves  
& PID controls*

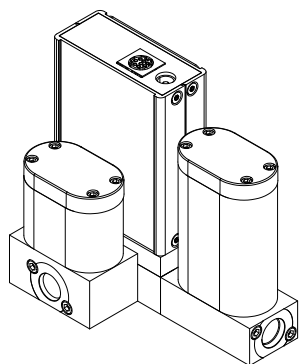
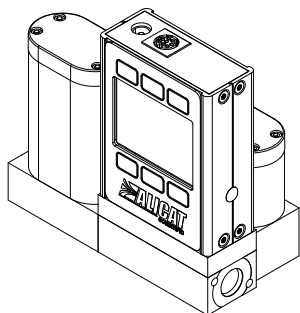
*Easy digital  
network integration*



*Total vacuum control.*

# Conductor-Series Pressure Controllers

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## Quick Specifications:

### Pressure Ranges:

10, 100, 1000, and 1000 & 10 TorrA

### Operating Range:

0.1–100% full scale

1000:1 Turndown

### Accuracy:

0.5% of full scale (NIST traceable)

### Repeatability:

0.05% of full scale

### Analog Outputs:

0–5 Vdc, 0–10 Vdc,

1–5Vdc or 4–20ma

### Communications:

RS-485 Serial, Modbus RTU (over RS-232 or RS-485),

Modbus TCP/IP, DeviceNet,

EtherCAT, EtherNet/IP, Profibus

### Process Connections:

$\frac{1}{16}$ –20 SAE J1926 Port, options for compression, or Swagelok® (including tube, VCO®, and VCR®)

## Fast vacuum controller

### •Fast & accurate

Valves and PID tuning hit their set points in milliseconds

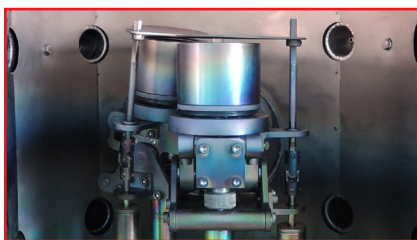
### •Connected

Many protocols supported

### •Backpressure control

Downstream valve positioning for when you cannot install the controller upstream and need the same fast back pressure control

## Selected Applications



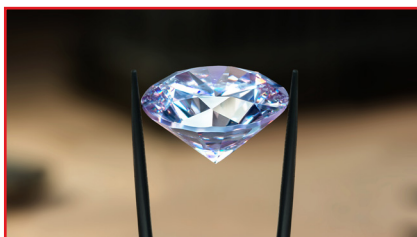
### Sputtering

Thin film deposition requires careful control of the depositional environment. Accurate control in 30 ms and accuracy at 0.5% of full scale ensure the right depositional environment for even coating.



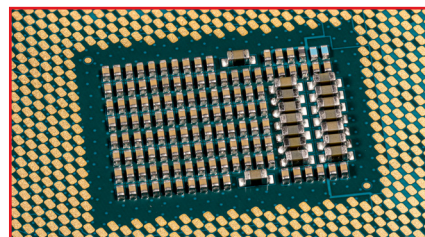
### CBD Extraction

When quality and yield matter, the precision pressure control is essential. Conductor series pressure controllers enable real time adjustments and minimize changes in pressure. Consolidate your pressure controller, pressure gauge, and throttle valve into one reliable, upstream controller.



### Synthetic Diamond Manufacturing

When trying to build a diamond layer by layer, the environment for chemical vapor deposition must be carefully controlled. Contamination is always a concern, so an upstream, simplified control system is the perfect solution. Faster response times and better stability help produce purer diamonds.



### Semiconductor

*(Wafer cooling, disk drive filling, etc.)*

The various processes using Helium under vacuum are often used in semiconductor manufacturing. Because of its heat transfer and low viscosity properties, wafer cooling and disk drive filling applications utilize these processes.