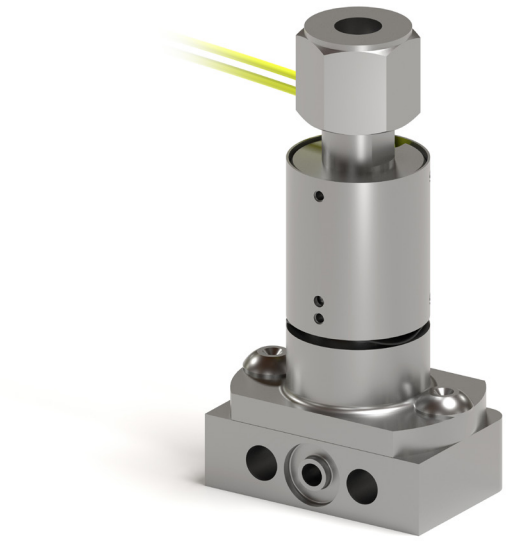

Atomic Layer Deposition Pilot Valve

The atomic layer deposition pilot valve was a two-position, three-way valve that was designed for the extremely fast cycle rates of ALD (atomic layer deposition) applications. Its response time was less than 6 milliseconds, and it was able to operate in temperatures as high as 200°C.

Features & Benefits

+ Two-position, three-way valve pilot valve
+ Ultrafast response
+ High operating temperature
+ Compact design
+ Configured for customer's power requirements

Applications

+ Atomic layer deposition
+ High speed
+ High temperature
+ Pressure control

Technical Data (custom configurations available)

+ Operating voltage: 12 to 30 Vdc
+ Operating pressure range: 0 to 500 kPa
+ Operating temperature range: -40°C to 200°C (-40°F to 392°F)
+ Operating frequency: 100 to 300 Hz
+ Resistance at 20°C: 48 Ω ± 4.8 Ω
+ Inductance: 68.6 mH
+ Flow rate: 35 L/min
+ Leak rate: < 2 cc/min
+ PWM pressure control: 10 to 90% duty cycle
+ PWM vacuum control: 10 to 90% duty cycle
+ Response time: < 6 ms
+ Burst pressure: 5000 kPa
+ Vibration: 20 G

All TLX components are customized to fit system requirements, meaning technical specifications are unique to each customer and design. Examples given are for illustration purposes only.

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Dimensional Drawings (dimensions in millimeters [inches])